AN ANALYSIS
OF
INDUSTRY-SPECIFIC EFFECTS
IN
SCOTTISH INDUSTRY

by

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Dedicated to my Parents (the third supervisor)

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Signed Declaration

I hereby confirm that the following thesis has been composed by the signatory and is entirely my own work.

David W Notman

Abstract

This thesis is divided into three sections in line with the following objectives :-

1. to use panel data techniques to estimate a set of (net) industry-specific effects (ISEs) in profit for a number of Scottish industries,
2. to isolate and determine variables that may underlie the distribution of (net) industry-specific effects,
3. to respecify the Structure-Conduct-Performance (SCP) Paradigm.

The set of (net) ISEs in profit is obtained by estimating a series of panel data models based on a Scottish industry dataset which maximises cross-industry heterogeneity (Chapter *3*). These general covariance models (GCMs) for the Scottish industrial sector are composed of cross-industry structural variables and a set of industry-specific parameters (essentially a set of industry dummies).

The variables that may be responsible for the set of (net) ISEs in profit form the second part of this research thesis. Included in this analysis are :-

1. business cycle factors (Chapter *4*),
2. accounting measures and ratios (Chapter *5*),
3. indigenous industry conduct (Chapter *6*).

The presence of business cycle factors - the notion that industries operate on different stages of the business cycle - are tested using industry-per-time period models. These models are analogous to general covariance models except that instead of industry-specific dummies, the dummies are denoted for both time interval and industry. Correlating accounting measures such as income gearing and the borrowing with (net) ISEs is one method of testing the importance of this rich source of data. Here the thesis attempts to redress the bias in IO literature against the use of accounting datasets. Spatial factors also figure in this thesis, with the likelihood that geographical market segmentation has links with industry profits. Finally, the role of indigenous industry conduct (firms playing games unconditioned by market structure) is considered as a possible determinant of (net) ISEs in profit.

The thesis concludes with a respecification of the SCP Paradigm (Chapter 7). The distribution of industry profits can no longer be explained in terms of cross-industry variations in market structure. Rather, industry-specific effects, the combined effect of a number of factors, must also contribute to a cross-industry profits distribution. The new paradigm which forms a conclusion to this thesis reflects this opinion.

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Chapter 1 Scope and Overview

1.1 Objectives

Why is it that one industry is defined by a healthy profit environment and another by financial loss-making? This question has in the past and will continue to be in the future of fundamental importance to industrial organisation (IO) research. In this research thesis, cross-industry profitability is analysed from an alternative perspective, firstly by estimating a set of *industry-specific effects in profit* and analysing their *underlying nature*. By underlying nature the emphasis is on the characteristics of each industry that may be responsible for the set of industry-specific effects.

The objectives in this research thesis are therefore ordered as follows :-

1. **The estimation of industry-specific effects models.**

   This estimation forms the basic building block of the following research thesis. The methodology is to rely on existing panel data estimation techniques to estimate fixed effects parameters for a sample of Scottish industries.

2. **The estimation of industry per-time period specific models.**

   Industry-per-time-period models test for profit variations between industries due to the business cycle effect. Each industry is influenced independently by the business cycle and profit differences between industries reflect this phenomenon.

3. **The correlation of published accounting data with the set of industry-specific and industry-per-time-period specific effects.**

   This objective tests for the usefulness of accounting data in the determination of industry profit, an important debate within industrial organisation. Data on labour and capital costs, the current ratio and income gearing are included in a number of variables tested for links to the set of industry-specific effects.

4. **The correlation of spatial factors with the set of industry-specific effects.**

   This objective attempts to ascertain the importance of the spatial or geographical distribution of firms in the set of industry-specific effects. The methodology involves correlating a geographical concentration index (GCI) with the industry-specific effects.

5. **An investigation into indigenous industry conduct and how it contributes to the set of industry-specific effects.**

   Indigenous industry conduct (the playing of games specific to an industry) is analysed in terms of theoretical models and proxied empirically by market share firm turnover. The difficulties - in the context of this thesis - of determining the role of indigenous industry conduct in the set of industry-specific effects, and how this may be circumvented concludes this analysis.

6. The role of industry-specific effects in the determination of industry profits forms the basis of a new paradigm.

Industry profits are in some part a function of *industry-specific effects*. Therefore, any adequate paradigm of industry profitability must recognise their importance. The structure-conduct-performance paradigm fails explicitly to do so and is modified accordingly.

1.2 Literary Sources

The remainder of this chapter provides an account of empirical literature in industrial organisation from the earliest *cross-industry regressions* (CIRs) to the emergence of *panel data techniques*. Beginning with attempts to estimate the Structure-Conduct-Performance (SCP) Paradigm, the chapter shows how the development of empirical literature has invariably followed theoretical innovations. For example, once the theoretical case for *feedback effects* was in place, there was a requirement for simultaneous equation methods. Likewise the growing ascendancy of *game theoretic* models demanded an empirical outlet. This came in the form of attempts to measure *conjectural variations*. Currently, empirical research in industrial organisation is weighted towards panel data estimation. This literature recognises contributions from game theory - as industry-specific effects - while maintaining links with the 'Classical' past. Panel data techniques continue to look for inter-industry and -firm relationships not dissimilar to the original SCP approach.

1.3 The Classical Approach

The *Structure-Conduct-Performance Paradigm* is now the traditional classical methodology for the explanation of industry profits. Industry structure governs the behaviour or conduct of industry incumbents, with the conduct regime in turn determining industry performance. The original SCP Paradigm set down a unilateral causation from market structure through conduct to industry performance. Industry conduct was wholly *conditioned* by market structure.

The SCP Paradigm was originally unsuitable for empirical estimation. Its reformulation by Bain (1951) was more a matter of empirical expediency than theoretical accuracy. The relegation of the difficult-to-measure firm conduct for the easy-to-measure market structure made for much empirical activity within the SCP framework. The structure-performance relationship was easily within reach using *cross-industry regression* (CIR) estimation techniques. Empirical work on this structure-performance linkage peaked during the *1970*s. A summarisation of the major studies from the *1970*s into the SCP Paradigm are set down in table *1-1* (shown overleaf) :-

TABLE 1-1: Studies into the structure-performance relationship in the UK.[1]

Authors	Concentration	Economies of scale entry barrier	Advertising
Cowling and Waterson (1976)	+	n. inc.	n. inc.
Waterson (1980)	+	n. inc.	n. inc.
Caves et al. (1975)	+	+	+
Hart and Morgan (1977)	+	(-)	+
Hitiris (1978)	+	n. inc.	(-)
Holtermann (1973)	(-)	(-)	(+)
Khalilzadeh-Shirazi (1974)	(+)	+	(+)
Khalilzadeh-Shirazi (1976)	+	+	+
Nickell and Metcalf (1978)	+	(-)	(+)
Phillips (1972)	+	-	+
Shephard (1972)	+	n. inc.	n. inc.

n. inc. not included
notes : no parenthesis indicates 5 per cent significance using a one-tailed test.

With the exception of Holtermann (1973) the general observation is that industry concentration has some positive effect on industry profits. This was the central finding of classical industrial organisation. It confirmed the 'a priori' expectation that greater concentration in an industry - fewer firms - must mean ceteris paribus higher profit margins for the remaining incumbents.

Invariably the importance of the concentration-profit relationship meant that it has developed its own literature set. This is typical of the majority of research done initially under the remit of the SCP Paradigm. Chief amongst the empirical innovations in the concentration-profit relationship was a shift to a more encompassing measure of concentration. The Hirschmann-Herfindahl Index (1964) and Entropy measure by Jacquemin and de Jong (1977) are leading examples of this development. Theoretical innovations concentrated on the possible nature of the structure-performance relationship.

For example, the *threshold effect* enjoyed a period of popularity as in Meechan and Duchesneau (1973). However the dominance of the view that the concentration-profit relationship is part of a wider whole and cannot be analysed in isolation ensured its literary recapture by the SCP Paradigm. This is true of SCP research in general. The SCP Paradigm is an empirical nexus for various branches of industrial organisation theory, each a literary specialisation in its own right.

The *economies of scale* literature has always had strong ties with the SCP Paradigm. Although theoretically independent, its empirical measurement was quickly brought to serve the Paradigm. Economies of scale barriers to entry were first highlighted by Bain (1956). Where the average incumbent size was significant, economies of scale barriers would likely prevent entry. Profit margins in such an industry would therefore increase free of the threat of *possible competition*.

Measurement of economies of scale barriers to entry has typically centred around the identification of a *minimum efficient size* (M.E.S) of firm (or plant). The *engineering approach* characterised by Bain (1956), Pratten (1971) and Wibe (1984) requires an intensive case-study of the industry itself. The *survivor technique* is free of such constraints, but nevertheless suffers from inconsistent estimates [Rees (1973)] and the likelihood of identifying more than one M.E.S of firm [Shepherd (1967)].

It is a *Darwinian* technique based on the concept that the *least cost group of firms* will be more successful in terms of market share or sales growth etc. Sub-optimal firms however will continue to survive for a number of reasons including spatial segmentation. It is reasonable to conclude that the measurement of economies of scale barriers to entry for the SCP Paradigm has thus far failed to reach consensus. Table *1-1* highlights the problem, with only three out of a total of six studies confirming a positive structure-performance link. This is not to say that the theory is at fault.

Rather the measurement of economies of scale barriers to entry is fraught with difficulties and error.

The literature on advertising reflects the duplicity over its actual role in IO. The SCP Paradigm presumes to consign advertising to a structural role. Within this consignment there are two distinct schools of thought. Firstly, advertising creates its own barriers to entry so that a 'capital requirement' is enforced upon the potential entrant [Bain (1968), Comanor and Wilson (1974; 1979)]. To survive the entrant must be prepared to advertise. Conversely, advertising can be seen to enhance competition [Stigler (1961), Nelson (1974b; 1978)] through the provision of useful information. In this environment new entrants can advertise their presence in the market [Telser (1964)]. Table *1-1* confirms a positive link between advertising and profits which has established itself as the dominant hypothesis.

Recently industrial economics has embraced the notion that advertising may be a strategic variable in the conduct of firms. Telser (1964) is an early example of this view where the new entrant uses advertising expenditures as a strategy for the avoidance of price competition. Furthermore, Schmalensee (1978a), Milgrom and Roberts (1986) and Rogerson (1983) analyse the strategic role of advertising in signalling product quality and extending the product life cycle.

A further complication is to see advertising purely in terms of performance. In particular in industries where advertising is endemic, incumbent firms may review their relative performance in terms of advertising budgets. This view leads to a literature set in which the traditional SCP Paradigm is reversed and advertising becomes some function of market structure. Lambin (1970) and Cable (1972) were among the first to investigate firm advertising elasticities with respect to industry concentration.

Table *1-1* reviews the three main elements of structure. However the SCP Paradigm was well placed to embrace other important elements of market structure. The traditional SCP approach developed by attempting to provide as large a coverage as possible of structural influences on industry profitability. For example, it was always presumed that significant import penetration was likely to have a negative influence on domestic profit rates. Geroski (1981,1982) and Hitiris (1978) confirmed this hypothesis.

1.4 Simultaneous Equations Methods

Prior to the downfall and eventual abandonment of the classical SCP Paradigm, it had shown remarkable flexibility. One example of this flexibility was its ability to incorporate *feedback effects*. The traditional SCP Paradigm could be made to incorporate all forms of complex feedback relationships providing the underlying SCP causal relationship was retained.

Feedback effects and their obvious existence demanded some empirical outlet. This was to come with the application of *simultaneous econometric estimation* to IO. Early examples of the simultaneous methodology are to be found in Greer (1971), Weiss (1971) and Strickland and Weiss (1976). The Greer (1971) model was a crude attempt to model the feedback advertising-concentration relationship :-

$$A = f(C,G)$$
$$C = F(A,C,X)$$
$$G = g(A,Y)$$

where X and Y are two exogenous variables necessary for the identification of the system and G is the industry growth rate. The model purports to test the hypothesised dual causal relationship between advertising intensity and the level of concentration.

However it was soon observed that there was little difference between the parameter estimates of simultaneous and single-equation studies [Sawyer (1985)]. This conclusion generated a divergence in the IO literature over the usefulness of simultaneous techniques. Proponents of single-equation techniques dismissed feedback effects as insignificant. Others believed that the fault lay with the method of estimation.

Of these, there were those who sought to improve the technique; for example, the employment of the Hausman and Wu (1976) test for endogeneity as a feasible 'system-building' technique [Geroski (1982)]. Similar efforts were made by Chou (1986) and Pagoulatos and Sorensen (1981). Against this, a number of industrial economists advocated the abandonment of simultaneous methods. There argument was that simultaneous regression models were no more than a crude representation of any joint structure-performance relationship [Davies (1994)].

It was the latter argument that held sway. Perhaps in earlier times the supporters of the simultaneous equation methodology would have carried the debate. By the early 1980s the whole idea of stable cross-industry structure-performance relationships was in serious trouble. A growing body of opinion in IO that *intra-industry differences* were very significant was to herald the end of the SCP Paradigm.

1.5 Conjectural Variations

The central idea of the SCP Paradigm was that conduct - interaction between firms - was some function of market structure. The SCP Paradigm was a 'black-box' theory of the firm where incumbent interaction was specific to market structure. The emergence of *game theory* as a major branch of industrial organisation destroyed the classical approach. Game theory models, composed of firm interaction, where the interaction between firms was *not* specific to market structure became attractive in this new *industry-specific climate*. Each industry must be analysed and modelled individually. Any attempt to estimate a cross-industry regression would be heavily influenced by the presence of intra-industry differences (industry-specific effects).

Work that had been ignored by the Marshallian School and went unnoticed for over one hundred years [Hay and Morris (1991)] by Cournot (1838) and Bertrand (1883) was immediately in demand. Implicit in these models of oligopoly competition was the notion of a given market structure[2]. Competition arose not because of the number of firms, but rather how an oligopolist might *conjecture as to the response of a rival incumbent*. How a firm conjectures governs its conduct. *Conjectural variations* are completely independent of the number of incumbents (market structure).

The conjectural variation (CV=0) defines the *Cournot model*. Changes in the number of incumbent firms does not preclude Cournot competition - or any other behavioural regime for that matter. It follows that competition is possible in a duopoly Bertrand and Cournot framework, an outcome disallowed under the Classical SCP Paradigm. With both Bertrand and Cournot models - as for all game theory models - the critical parameter is the set of firm conjectures : industry-specific conduct. Bertrand and Cournot models "are particularly sensitive to changing conjectures" [Martin (1993)].

The development of game theory has seen numerous variations around the central question of the nature of firm conjectures. For example, entry-deterrence in multiple markets was examined by the *Chain Store Paradox* [Selten (1978)] where *incumbent reputation* was shown to be fundamental to the outcome. Similarly, *trigger pricing strategies* practised by cartels on defectors [Green & Porter (1984), Porter (1983a,1985)] and *R&D competition* (patent races) between firms [Beath *et al.* (1989b)] depend on players' conjectures (probability estimates).

Ulph (1983) motivated by the need for theoretical rigour proposed the concept of a rational conjecture. The *rational conjecture hypothesis* presumes that firms will make reasonable and consistent conjectures [Bresnahan (1981)]. More specifically, Ulph (1983) defines a rational conjecture as having the following property :-

"*if the profits that a rival firm accrues in accordance with heeding the conjecture are at least as great as the profits accrued from shifting output by any other degree then such a conjecture must be rational. If this condition is not met then the presumption must be that the original conjecture was irrational in that the conjecturing firm failed to foresee other output combinations that imply higher profits for rival firms.*"

Interestingly it follows from this definition of rational conjectures that experimenting with conjectures would also be perfectly rational. That is, the gain from permanently increasing profits and obtaining the rational equilibrium point would outweigh the foregone profits resulting from failed experimentation. Ulph (1983) then was first to prescribe the need for dynamic game modelling as firms are likely to adjust their conjectures through time in their efforts to find a suitable rational equilibrium.

Rational conjectures provides theoretical rigour when speaking about how firms conjecture regarding another's response. That is, they conjecture rationally and such rationality is based on a common profit-maximisation solution for both conjecturer and responder. Moreover, the rational conjecture hypothesis was an important critique of existing literature on conjectural variations. On this basis, Cournot conjectures are by definition irrational, along with a great many other possible equilibria in game theory models. Furthermore, the rational conjecture critique has spawned its own literature set [Dixon (1986b)]

The rational equilibrium is dependent on perfect information. A 'soap' of informational 'white noise' may result in a firm wrongly adjusting its previous conjecture or for that matter failing to adjust when adjustment is required. In these circumstances firms may continue to act rationally even although they are observed as irrational. This may arise when firms fail to perceive the difference between a rival's reaction and a general change in market conditions or information regarding a rival's cost structure is deficient. Models dealing with this form of informational inefficiency will be the subject of later discussion, particularly a review of regime-switching models - the resultant consequences of disinformation - in the Brander and Zhang paper (1993).

A second innovation in the theory of conjectural variations was observed with Riordan (1985) and Brock and Scheinkman (1985). This was a rejection of static game theory as suitable technique for modelling firm conjectures and in turn spawned *supergame theory* [Rotemberg and Saloner (1986)]. Conjectural variations represent a dynamic process and static models of a dynamic process can only generate false results [Tirole (1993)]. Brander and Zhang (1993) and Slade (1992) represent attempts to measure conjectural variations using multi-period or supergame models. Once again, empiricism is quick to accommodate developments in theory. Finally, consolidation was achieved with Kalai and Stanford (1985) by inserting rational conjectures within a supergame, thereby joining the two theoretical innovations in conjectural variations.

Riordan (1985) also considered the effects of imperfect information on the conjectures of firms. A theory of 'negative' conjectures emerges based on the firm's inability to accurately determine the evolution of the market demand function. Once the economist is prepared to countenance multi-period game modelling with a finite number of time periods, then a whole set of hitherto implausible conjectures emerge. In this model a cartelship is maintained through credible threats of retaliation by participants.

Riordan (1985) described the dynamic process as follows. A firm may increase its level of output which lowers the market price. This reduction in market price is incorporated into a rival's conjectural informational set, which presumes that the demand curve will shift down and so reduces its output level. This firm has necessitated a dynamic 'negative' conjectural variation because of disinformation. The firm's conjectures lock on to the price set by rivals as a method of assessing overall market conditions. In this fashion it is possible for a firm to confuse rivals by adjusting its own output and allow rivals to conjecture that a change in prevailing market conditions has occurred.

Given that the conjectural variation is so fundamental to game theory models, it is hardly surprising that literature evolved devoted entirely to its measurement. One of earliest attempts at measurement was by Iwata (1974) looking at the Japanese flat glass industry. The industry was suitable for study as it was heavily oligopolised with a homogeneous product. The main empirical conclusion of Iwata (1974) was that the oligopolists typically behaved in a Cournot fashion conjecturing a *zero response from rival incumbents.*

Iwata (1974) reiterates the theoretical derivation of conjectural variations from a standard market demand function. Suppose the industry demand function - in this case the Japanese flat glass industry - can be depicted as :-

$$p = f(D), \qquad \text{Eqn. (1.1)}$$

where p denotes the industry price. Total industry supply (S) is given by :-

$$S = q_1 + q_2 + ... + q_n, \qquad \text{Eqn. (1.2)}$$

where, n denotes the number of firms in the industry. All n firms are profit maximisers of the function :-

$$\pi = R_j - C_j, \qquad \text{Eqn. (1.3)}$$

expressed in terms of firm j.

Taking the first derivative of $R_j = pq_j$, the conjectural variation of firm j is given by the expression :-

$$\gamma_j = \frac{d}{dq_j}\left(\sum_{k \neq j} q_k\right). \qquad \text{Eqn. (1.4)}$$

or :-

$$\gamma_j = \frac{d\left(\sum_{k \neq j} q_k\right)}{dq_j}, \qquad \text{Eqn. (1.5)}$$

which describes how j conjectures the 'industry' output response to an incremental change in its own output.

Denoting the price elasticity of demand as α, it is also true that :-

$$\gamma_j = \frac{\alpha D(c_j - p)}{pq_j} - 1 \,. \qquad \text{Eqn. (1.6)}$$

The conjectural variation then is a function of the price elasticity of demand, the market demand function and the marginal cost of firm j (c_j) .

The basic approach of Iwata (1974) was repeated in Slade (1986) and Conrad (1989). Slade (1986) studied the Vancouver British Colombia gasoline retail market, concluding that the majority of conjectures were positive. In Conrad (1989) a study of a US brewing firm with an eight per cent market share confirmed the presence of Bertrand conjectures.

Perhaps the seminal set of papers in this branch of literature were by Brander and Zhang (1990,1993). Their research into the US airline industry consisted of a panorama of recent techniques and work into conjectural variations. The conjectural variation for firm *j* in Brander and Zhang (1990) is denoted as (v_j):-

$$v_j = \frac{(p - c_j)\eta(Q)}{ps_j} - 1 \,, \qquad \text{Eqn. (1.7)}$$

where, $\eta(Q) = \frac{-dQ}{dp}\frac{p}{Q}$; the industry price elasticity of demand,

c_j = firm j's marginal cost,

s_j = firm j's market share.

The Iwata (1974) technique is readily apparent in *1.7*. Although the Brander and Zhang (1990,1993) studies were also to lend support to Cournot conjectural variations, a number of empirical innovations were introduced. For example, Brander and Zhang (1993) considered dynamic interactions on a reduced set of duopoly airline routes. The time-dependent or dynamic conjectural variations are determined through estimating the following equation :-

$$v_{tk}^{j} = \frac{p(X_{tk}) - c_{tk}^{j}}{p(X_{tk})} \frac{\eta_{tk}}{s_{tk}^{j}} - 1, \qquad \text{Eqn. (1.8)}$$

where t denotes the time interval and k the airline route.

Another innovation in Brander and Zhang (1993) is a recognition of the deficiency of 'constancy' conduct models and a requirement to test 'regime-switching' (RS) models. Regime-switching is a phenomenon whereby firms change their conjectural variations. The first rigorous treatment of conduct switching was by Green and Porter (1984) which used informational inefficiency to explain why firms may switch from a collusive strategy to a Nash punishment phase. In this way it is possible to develop a plausible explanation of price wars between firms. Once a cartel member is presumed to be cheating - pricing below a trigger price - its rival punishes it by 'playing' a Nash Bertrand solution which is associated with lower payoffs for both firms. Brander and Zhang (1993) employed two very similar RS models, the distinguishing feature between them being the conduct in the punishment phase; namely, a Nash Cournot or Bertrand equilibrium solution.

RS models then predict that the value of the conjectural variation will switch at least twice during a particular time series; that is, switching to signify the initiation of a punishment phase and switching back thereby signalling the conclusion of such a phase.

The eclipse of conjectural variations was undoubtedly the result of empirical difficulties. The estimation of *1.7* and *1.8* is not straightforward. Marginal cost and the price elasticity of demand were assumed to be exogenous by Iwata (1974), a simplification too far as can now be observed in subsequent work. Through improved datasets and the correct choice of industry - see [Brander and Zhang (1990,1993)][3] - investigators were able to avoid simplifying assumptions and make reasonable estimates of the conjectural variations. Yet the estimation procedure remains difficult and is only applicable to certain industries.

1.6 Panel Data Techniques

Industrial organisation has been slow to adopt *panel data techniques* with Hoch (1962) a singular early example of an attempt to measure the Cobb-Douglas production function using both time-series and cross-section data. The adoption of panel data techniques tended to be much more advanced in other subject areas; for example, wage determination [Kreuger and Summers (1988) and Brown *et al.* (1990)].

The basic methodology is to use panel data to identify the inter- and intra-industry differences as in Schmalensee (1989a) and Schmanlensee (1989b) respectively. Both papers were seminal papers in introducing panel data estimation to IO, the former dealing with performance differences between industries, the latter with performance differences within industries. They have spawned their own literature set dealing with inter- and intra-industry performance differences and various aspects of structure [Toulan (1996)]. In this thesis emphasis will be placed on both inter- and intra-industry performance differences.

The main strength of the technique is the provision it makes for controlling for and identifying *intra-industry* and/or *intra-firm differences*. The problem of stability in the cross-industry parameter set is removed without the requirements for either a single-industry study (time-series) or directly addressing intra-industry differences (conjectural variations). For example, Sutton (1991) used a large panel dataset to select sub-samples of industries which are believed to share common attributes. By controlling for the intra-industry differences, Sutton was able to conduct a legitimate cross-industry study of sunk costs in food industries [Davies (1994)].

A number of papers have used panel data techniques to tackle specific problems in IO. For example, Haskel and Martin (1992b,1994) used a UK panel dataset with survey data to analyse capacity constraints. Similarly, panel data techniques have been used to investigate the links between inter-industry differences and the variations in trade [DeGhellinck, Geroski and Jacquemin (1988)] and more recently [Katics and Peterson (1994)].

The impetus for panel data techniques has also been observed at the firm level. The distribution of profit rates across an industry set may be due to firm-specific as well as industry-specific factors [Scott and Pascoe (1986), Amato and Wilder (1990)]. For example, Schohl (1993) considered the role of firm-specific factors (the micro-dispersion) in generating a performance (profit) distribution across industry lines. The main conclusion that firm-specific factors are more important than industry-specific factors in an industry-profit distribution has powerful repercussions for existing and future panel data IO literature, including this thesis.

The current debate focuses on the *nature* of the intra-industry differences; *industry-specific effects* in the empirical literature. Katics and Petersen (1994) regard these effects as *idiosyncratic*, being composed of a whole series of elements. To advance beyond this observation, it is necessary to attempt to identify what range of factors and/or variables underlie the set of industry-specific parameters. The following thesis represents a contribution to this debate.

1.7 The Structure of the Thesis

The structure of the thesis follows logically from the set of objectives (see above) and where the literary contribution concludes. Chapter *2* is a scene-setting chapter which while as its central focus looks at the *ordinary regression model* (ORM), also discusses variables and methods of measurement that underlie the thesis. Chapter *3* examines the methodology and estimation of a *general covariance model* (GCM) for a select group of industries. A short commentary on the *industry-specific effects* conclude the chapter.

Chapter *4* is the first of three chapters that comments on the underlying variables in the set of industry-specific effects. In chapter *4* variations in the business cycle between industries is tested with an industry per-time period specific model. Chapter *5* analyses accounting data at the level of the firm to establish possible correlations the set of fixed effects and standard accounting ratios and measures.

Chapter *6* provides a commentary on the role of indigenous conduct as a 'hidden factor' in the set of industry-specific effects. Finally, chapter *7* describes an alternative paradigm to the Structure-Conduct-Performance Paradigm. The distinguishing feature of this new working framework is its reliance on industry-specific (and time-specific) effects in the determination of industry profits.

[1]Reproduced from Sawyer, M.C. (1985). *The Economics of Industries and Firms*, 2nd Edition. Croom Helm Ltd.

[2]Note that market structure continues to frame analysis in game theory in order to reduce the number of possible equilibria.

[3]The Chicago airline industry used by Brander and Zhang (1990,1993) was a rich source of price and cost data. For most industries such a dataset is likely to be unavailable.

Chapter 2 The Ordinary Regression Model (ORM)

2.1 Introduction : "Setting-the-Scene"

The main concern in this chapter is to "set-the-scene" for later analysis. It is essentially composed of three parts, the first consisting of a review of IO variables used throughout this thesis, including their measurement within the context of the dataset. In what is effectively part two, economies of scale are estimated using *survivor analysis*. A discussion of the advantages and disadvantages of this technique is also included. In the final section the analysis shifts to the *ordinary regression model* (ORM), the estimation of which ensures a review of the set of Classical IO relationships. The conclusion is a short critique of the SCP Paradigm from an empirical perspective.

2.2 The Panel Dataset - Why Scottish Industry?

Table *2-1* describes the panel dataset central to this thesis. It is composed of *seventeen Scottish industries* from *1983-88* inclusive.

Table 2-1 : A Panel Dataset of Scottish Industry.

Industry Type	Number of Incumbent Firms	Number of Observations Per Variable
BUILDER'S MERCHANTS	27	162
BUILDING CONTRACTORS	58	348
ELECTRONIC COMPONENT MANUFACTURE	15	90
GENERAL HAULAGE	56	336
INDUSTRIAL RUBBER MANUFACTURE	6	36
INDUSTRIAL VALVE MANUFACTURE	8	48
KNITWEAR MANUFACTURE	32	192
PAPER MANUFACTURE	10	60
PETROLEUM PRODUCT DISTRIBUTION	17	102
PLANT HIRE	33	198
SERVICES to the OIL INDUSTRY	9	54
SLAUGHTERERS and MEAT PROCESSORS	24	144
STEEL MERCHANTS	13	78
TEXTILE MANUFACTURE	15	90
TIMBER MERCHANTS	35	210
VEHICLE DISTRIBUTION	69	414
WHISKY DISTILLING	37	222
TOTAL	464	2,784

The dimension (cross-section by time-series) of the panel - in terms of industries - is *102* observations per variable. This figure will be relevant in the estimation of a *general covariance model (GCM)* and identification of the set of *industry-specific effects* in Chapter *3*. Table *2-1* also lists the panel dimension; in terms of firms it is *2784* observations per variable. This aspect of the panel will be used increasing later in the thesis, particularly in Chapter *5*.

Why construct a Scottish industry dataset? The two principal reasons are :-

1. **The data was readily available.**

   The data listed in the set of appendices (see below) is taken from *Industrial Growth Scotland* and *Regional Company Surveys* (ICC Publications).

2. **The need to ensure sectional heterogeneity in the set of explanatory variables.**

   The actual choice of Scottish industries in table *2-1* is decided by the requirement to generate a significant amount of cross-sectional heterogeneity in industry profits. Since the principal aim of the thesis is to explain a profit distribution across industries, it follows that the choice of industries must reflect widely differing attributes.

The definition of a Scottish industry - for the purposes of this thesis - is that the incumbent firms are located in Scotland, a definition which is driven by the nature and quality of the data itself (see above). It is important not to confuse the concept of the industry with that of the market. The market may be UK or global. A 'Scottish' industry (as defined above) may be located in a market of which Scotland only constitutes a minority part.

This is especially true of whisky distilling and electronic component manufacture in Scotland. Conversely, in many cases the market will be sub-Scottish. Regional markets certainly exist in the timber merchanting industry.

A further definition problem concerns what firms actually constitute the industry? Using surveys of company accounts provides little or no information on the ownership structure of an industry. One caveat in this thesis is that the nature of the data collation may have exaggerated the number of incumbents in each industry. This is an unavoidable result of a survey of this size.

2.3 Variables in Empirical Industrial Organisation

The Structure-Conduct-Performance (SCP) Paradigm sets down no limits on the number and nature of structural variables that may or may not be included in any empirical estimation. In respect of this, the following discussion reviews the 'leading' elements of market structure from seminal papers in the past.

2.3.1 Concentration Measures

This thesis uses the *n*-firm concentration ratio (CRn), specifically the *3*-firm (CR3) and *5*-firm (CR5) standards for all its estimations. The *n*-firm concentration ratio is a *simple measure* of industry concentration measuring the cumulative market share of the *n* largest incumbent firms. It is a *partial* measure of concentration because it reviews only a proportion of the total number of incumbents in an industry.

The Hirschman-Herfindahl Index (HHI)[1] belongs to the category of *summary measures*[2] of industry concentration. Unlike the *n*-firm concentration ratio, summary measures of concentration take into account all incumbent firms within an industry :-

$$HHI = \sum_{i=1}^{n} S_i^2 \quad , \qquad \text{Eqn. (2.1)}$$

where :- S_i = the market share of the *i*th firm in the industry.

Table *2-2* (shown overleaf) lists the *3*- and *5*-firm concentration ratios along with the HHI for each Scottish industry. The annual figures have been averaged for the period *1983-88*.

Table 2-2 : Concentration Measures in Scottish Industry.

Industry Type	3-firm CR	5-firm CR	HHI[3]
BUILDER'S MERCHANTS	53.20	67.20	0.1458
BUILDING CONTRACTORS	36.04	45.49	0.0693
ELECTRONIC COMPONENT MANUFACTURE	89.30	93.39	0.4714
GENERAL HAULAGE	30.14	40.30	0.0517
INDUSTRIAL RUBBER MANUFACTURE	85.12	96.92	0.5263
INDUSTRIAL VALVE MANUFACTURE	72.10	89.80	0.2280
KNITWEAR MANUFACTURE	47.71	61.44	0.0998
PAPER MANUFACTURE	56.52	72.55	0.1531
PETROLEUM PRODUCT DISTRIBUTION	45.37	62.24	0.1112
PLANT HIRE	60.69	68.32	0.2332
SERVICES to the OIL INDUSTRY	63.86	85.02	0.1767
SLAUGHTERERS and MEAT PROCESSORS	53.87	67.19	0.1667
STEEL MERCHANTS	63.63	84.40	0.1773
TEXTILE MANUFACTURE	81.91	91.90	0.2866
TIMBER MERCHANTS	34.44	46.69	0.0646
VEHICLE DISTRIBUTION	36.10	46.06	0.0653
WHISKY DISTILLING	56.76	67.10	0.1737

The above industry set exhibits a wide range of industry concentrations[4], in line with requirement for cross-sectional heterogeneity. From *general haulage* with a CR3 score of *30* per cent to *electronic components* with *90* per cent, the significant cross-industry variance ensures adequate expression for the SCP Paradigm. This is important in the context of a thesis which endorses a non-Classical methodology and interpretation.

2.3.2 Profit Rates and Advertising Intensity

The industry *profit-sales ratio* and *advertising-sales ratio* (advertising intensity) are used to measure these two strategic variables. This represents one method of *standardising* industry profits and advertising. The profit-sales ratio has its own theoretical rationale, with models by Cowling and Waterson (1976) and Waterson (1984)[5]. In the context of this thesis, the profit-sales ratio is also easily constructed from the available data. Alternative methods of dealing with profits including the *profit-capital ratio* [Mann 1971] and the *price-cost margin* [Stigler (1968)] do not share this advantage. Table *2-3* describes the profit rate and advertising intensity for each of the seventeen Scottish industries in the dataset. Both variables are averaged for the period *1984-88*.

Table 2-3 : Profit Rates and Advertising Intensity in Scottish Industry.

Industry Type	Profit Rate (%)	Advertising Intensity
BUILDER'S MERCHANTS	3.321	0.613*
BUILDING CONTRACTORS	2.686	0.143
ELECTRONIC COMPONENT MANUFACTURE	5.838	0.000
GENERAL HAULAGE	3.272	0.090
INDUSTRIAL RUBBER MANUFACTURE	4.766	0.015
INDUSTRIAL VALVE MANUFACTURE	8.493	0.081
KNITWEAR MANUFACTURE	7.075	0.004
PAPER MANUFACTURE	7.827	0.000
PETROLEUM PRODUCT DISTRIBUTION	1.492	2.304
PLANT HIRE	5.404	0.803
SERVICES to the OIL INDUSTRY	3.054	2.407*
SLAUGHTERERS and MEAT PROCESSORS	0.562	0.518
STEEL MERCHANTS	4.606	0.000
TEXTILE MANUFACTURE	8.882	0.000
TIMBER MERCHANTS	3.660	0.187
VEHICLE DISTRIBUTION	1.492	1.264
WHISKY DISTILLING	13.794	0.553

* Data unavailable for 1984.

As with industry concentration, a wide band of profit-sales ratios across the Scottish industry set is observed. It will be the main task of this thesis to attribute such a phenomenon to the set of industry-specific effects.

Advertising intensity is measured by means of television advertising expenditure for the industry[6]. This may not necessarily be the same as advertising for the 'Scottish' market. For example, throughout the period 1983-88, whisky advertising was banned in Scotland. However, advertising for the industry continued in other markets. Despite this drawback, this data represents the best opportunity of achieving a 'handle' on relative rates of advertising expenditure across Scottish industries.

2.3.3 Imports, Growth and Productivity

Table *2-4* describes *import penetration*, *industry sales growth* and *average revenue product* (ARP) for each industry. Import penetration and average revenue product are averaged over the period *1983-88*; while for industry sales growth the period in question is *1984-88*.

Table 2-4 : Import Penetration, Sales Growth and Productivity in Scottish Industry.

Industry Type	Import-Sales Ratio	Sales Growth (%)	ARP
BUILDER'S MERCHANTS	0.62	9.7	69.4
BUILDING CONTRACTORS	0.17	7.7	46.1
ELECTRONIC COMPONENT MANUFACTURE	0.3	14.8	33.2
GENERAL HAULAGE	N/A	10.7	33.8
INDUSTRIAL RUBBER MANUFACTURE	0.44	5.5	50
INDUSTRIAL VALVE MANUFACTURE	0.55	2.1	45.1
KNITWEAR MANUFACTURE	0.23	10	26
PAPER MANUFACTURE	0.22	10.8	51.3
PETROLEUM PRODUCT DISTRIBUTION	1.58	5.4	232.2
PLANT HIRE	0.94	8.5	40.6

SERVICES to the OIL INDUSTRY	0.98	-3.8	39
SLAUGHTERERS and MEAT PROCESSORS	0.45	9.4	79.2
STEEL MERCHANTS	1.54	11.6	116.7
TEXTILE MANUFACTURE	0.08	13.3	26
TIMBER MERCHANTS	0.22	11.2	58.8
VEHICLE DISTRIBUTION	0.19	9.6	108.6
WHISKY DISTILLING	0	7.8	109.6

N/A not applicable

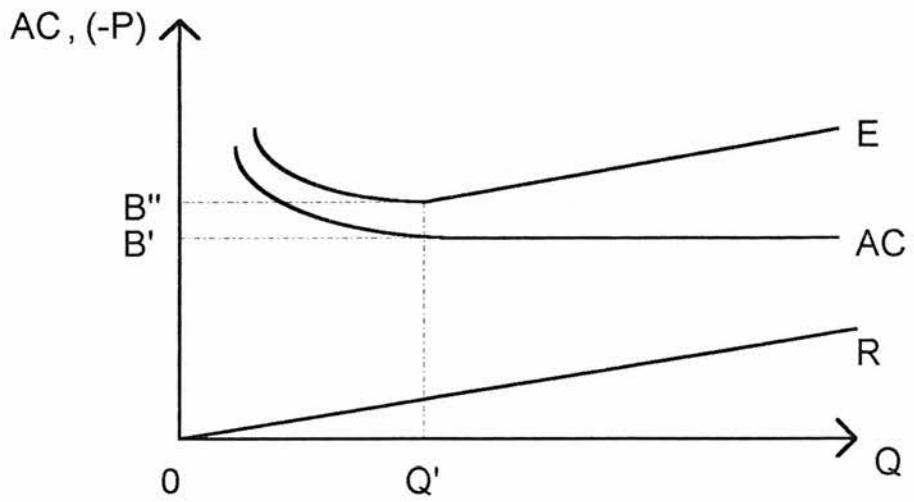
Import penetration for each industry is standardised using the *import-sales ratio*. The import data describes imports through the Scottish ports only. A difficulty with imports is that the Scottish economy is not segregated from the rest of the UK. The above import-sales ratios exclude both Rest of the UK competition routes and alternative routes of import into the Scottish economy. Another caveat is the imports that are recorded in data are not always destined for the Scottish economy, but other parts of the UK.

Sales growth is also measured in the standard linear fashion. Average revenue product (ARP) is defined as turnover per employee, an imperfect *partial measure* of industry productivity. However, the failure to account for the *total factor productivity*[7] of an industry is likely to be a significant source of industry-specific effects. This possibility is investigated in Chapter *5* by attempts to proxy the capital-labour mix across Scottish industry.

2.4 Economies of Scale

Economies of scale barriers to entry first highlighted by Bain (1956) are depicted in figure *2-1*.

Figure 2-1 : Scale Economies Barriers to Entry.



Schedule R maps the reduction in industry price that each level of entry induces. Schedule E - which is the sum of R and the industry average cost curve *(AC)* - is a loci of the lowest possible set of prices that will permit entry at any scale of operations. For example, if incumbent firms set their price for output Q' below B'', then profitable entry would be impossible. It follows that the height of the *economies of scale entry barrier* at Q' must be equal to *(B"-B')*.

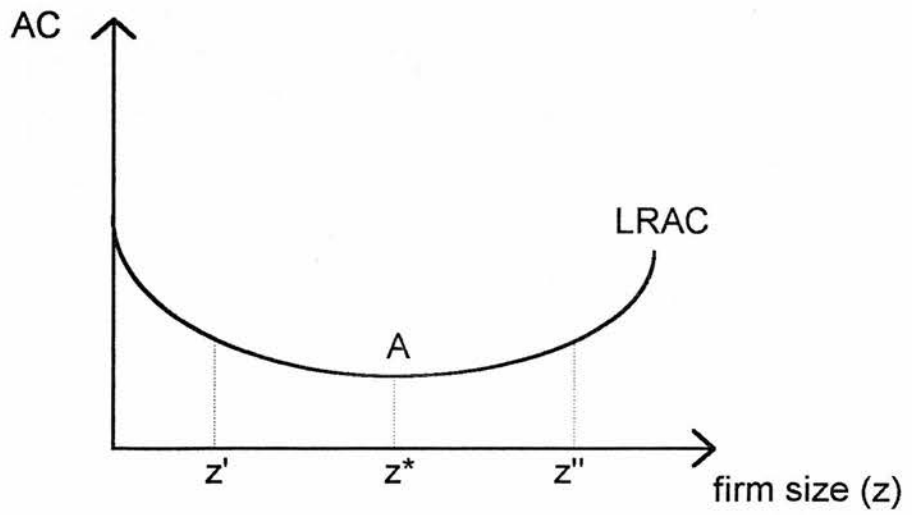
2.4.1 Survivor Analysis - the Theoretical Framework

The question of how to obtain an empirical "handle" on economies of scale barrier to entry has proved difficult to resolve. One proffered method was to measure the *minimum efficient scale (m.e.s.) of production* or *firm size (m.e.f.s.)*[8]. In terms of figure *2-1*, a larger *m.e.f.s.* increases the gradient of R and the vertical distance between E and AC. There is strong theoretical connection between the *m.e.f.s.* and the economies of scale barrier to entry.

Three techniques have been used in the past in IO to estimate the *(m.e.s.)* or *(m.e.f.s.)*. The estimation of production functions [Wallis (1973) and Johansen (1972)] along with the *engineering approach* [Pratten (1971)] requires detailed knowledge of intra-firm variables. The *survivor approach*, although likely to be less accurate than these other methods assumes only the minimum of datasets. This advantage has made it a favoured technique for a number of IO practitioners [Rees (1973) and Lyons (1980)].

The *Darwinian* notion that lies at the foundation of the survivor approach is very appealing. Only those firms which operate at the lowest point of the industry average cost curve will survive to market maturity. The expected observation is that the most "efficient" class of firms will continue to succeed in terms of market share and relative profit and growth rates. For example, in an industry with matching cost conditions to those in figure *2-2*, firms prefer the optimal cost limit at A to sub-optimal cost levels z' and z''. Point A indicates the lowest point on the LRAC curve, the "efficient" firm size *(z*)*. On market maturity, A would lie within the bounds of the *efficient size class of firms*. Measuring the lowest bound of the efficient size class determines the minimum efficient firm size *(m.e.f.s.)* and the extent of the economies of scale barrier to entry.

Figure 2-2 : The Classical LRAC Curve.



The *survivor technique* relies on observing the *relative performance of classes of firms* and any *size-class movements* (*migrations*) to identify industry cost conditions and the minimum efficient firm size *(m.e.f.s.)*. It is these procedures that have resulted in a number of difficulties with the whole concept of a survivor approach.

2.4.2 Survivor Analysis : a rudimentary approach

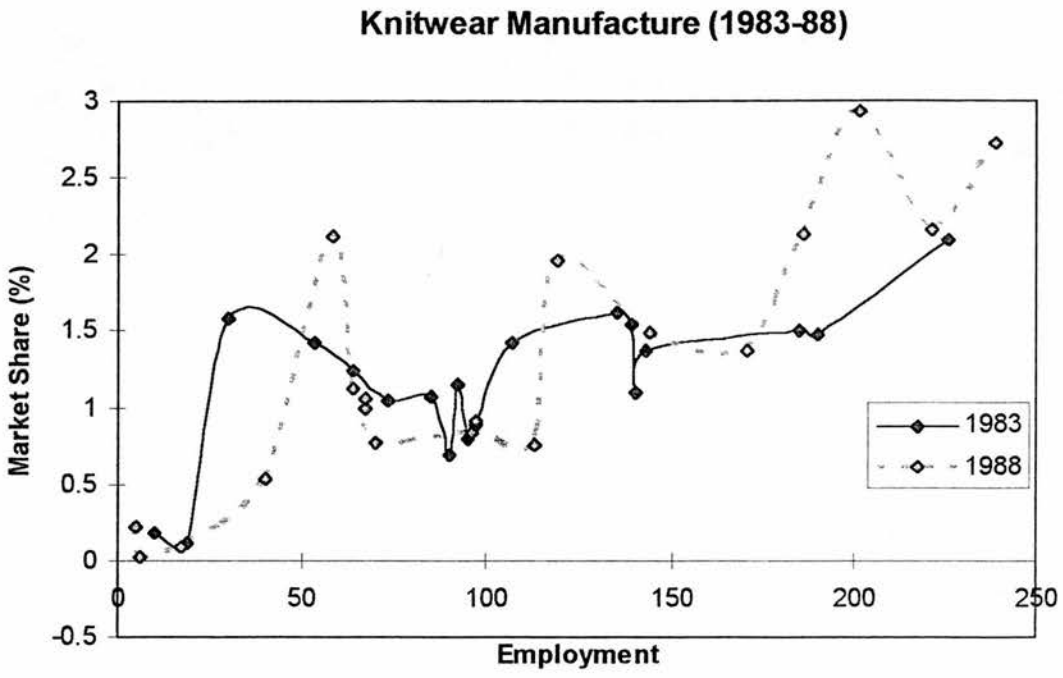
Table *2-5* describes a set of industry estimates of the minimum efficient firm size *(m.e.f.s)* using survivor analysis. The estimates, originally year-on-year, have been averaged for the period *1983-88* with the *m.e.f.s.* expressed as a percentage of the total industry size. Labour employment was adopted as an appropriate variable to proxy firm size.

Table 2-5 : Minimum Efficient Firm Size (% of Total Industry) - 1983-88.

Industry Type	m.e.f.s. (%)
BUILDER'S MERCHANTS	0.61
BUILDING CONTRACTORS	0.56
ELECTRONIC COMPONENT MANUFACTURE	2.24
GENERAL HAULAGE	0.48
INDUSTRIAL RUBBER MANUFACTURE	6.44
INDUSTRIAL VALVE MANUFACTURE	5.42
KNITWEAR MANUFACTURE	0.96
PAPER MANUFACTURE	3.96
PETROLEUM PRODUCT DISTRIBUTION	6.30
PLANT HIRE	0.82
SERVICES to the OIL INDUSTRY	3.50
SLAUGHTERERS and MEAT PROCESSORS	1.73
STEEL MERCHANTS	4.73
TEXTILE MANUFACTURE	0.53
TIMBER MERCHANTS	2.21
VEHICLE DISTRIBUTION	0.68
WHISKY DISTILLING	1.02

The basic methodology focuses on the *market share performance* of incumbent firms within each industry[9]. Figure *2-3* represents the shift in *market share frontiers* between *1983* and *1988* for twenty of the smallest Scottish knitwear manufacturers. The difficulties of survivor analysis should be immediately apparent. At best survivor techniques can only yield a broad insight into the "efficient" class of firms. For example, in the employment range *(60-120)* employees, the market share performance of this class of firms has been one of deterioration. However, in excess of *120* employees, the market share performance of firms improves[10]. Therefore, on the basis of figure *2-3*, the minimum efficient firm size *(m.e.f.s.)* in knitwear manufacture lies between *100* and *150* employees.

Figure 2-3 : Survivor Analysis in Knitwear Manufacture (1983-88).

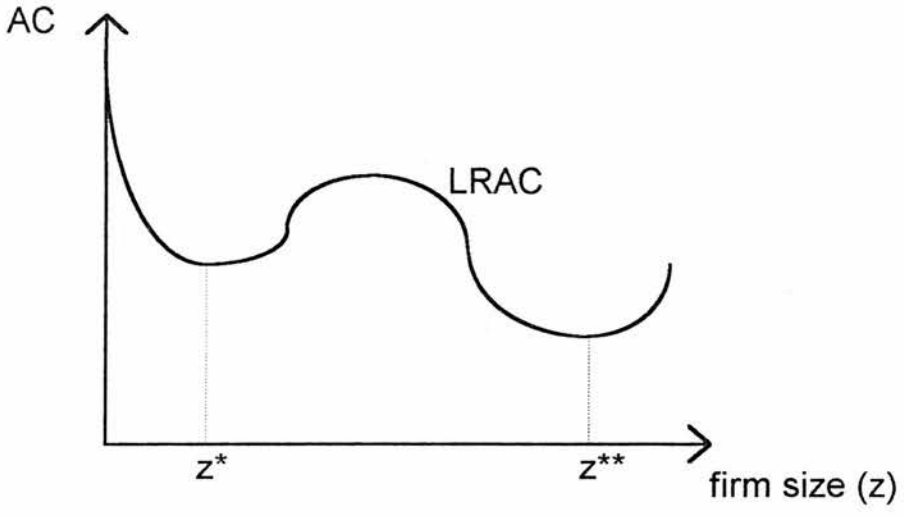


Although crude, this particular approach can provide a relative picture of cross-industry economies of scale barriers to entry. One particular caveat is the need for analytical consistency given the general uncertainty and inconsistency that defines the survivor approach [Rees (1973)].

2.4.3 Difficulties with Survivor Analysis

A number of empirical problems have emerged with the above survivor analysis. One of the most troublesome has been the tendency of survivor techniques to identify more than one *m.e.f.s.* for an industry [Shepherd (1967) and Rees (1973)]. This would imply cost curves of the form as in figure *2-4*, where two efficient class sizes at z^* and z^{**} have been identified :-

Figure 2-4 : Empirical Cost Curves with Survivor Analysis.



One explanation for this phenomenon relies on the presence of *market segmentation* within the industry [Bain (1969)]. Although z^* is a second-best solution, the presence of niche marketing, goodwill and spatial segmentation enables a smaller sub-optimal firm to survive within the industry. Other more significant explanations are unreliable data and a flawed approach.

A second problem concerns how to estimate the size of firms. Typically, labour employment has been used as the most appropriate measure of the scale of operations within the firm [Hart (1962)], ostensibly because of the availability of data. Doubts regarding its application in capital-intensive industry [Sawyer (1985)] have been neutralised somewhat by the argument that capital will always have a use value for labour. Nevertheless, there remains little consensus on this aspect of survivor analysis.

The geographical distribution of manufacturing plants within a single firm also poses a problem for survivor analysis. It is possible that a firm with one hundred employees may be producing from several locations.

Applied to an industry with many multi-plant incumbents, survivor techniques would overestimate the minimum efficient scale of operations. Therefore work by Lyons (1980) into the importance of the *plant-firm ratio* assumes a new importance[11].

Technical change and the presence of the business cycle can create further difficulties for the application of survivor analysis. The minimum efficient firm size is likely to be continually in a state of flux due to technical change in the industry [Sawyer (1985)]. Furthermore, new technologies will not be distributed uniformly across industry incumbents [Mansfield (1968)], an implicit assumption with survivor techniques.

Cyclical changes in demand will also exert a significant ongoing effect upon a firm's scale of operations. A firm would be expected to expand and contract its scale of operations in response to rising and falling demand conditions respectively. Moreover, industries are liable to be at varying stages of the business cycle thus ensuring another difficulty for cross-industry comparison of the economies of scale barrier to entry[12].

2.4.4 Refining Survivor Estimation

A number of improvements may be made to the basic survivor methodology. A major omission with the rudimentary approach is its failure to track firms, particularly the *class migrations of firms.* As a measure of the performance of each firm, the *residual growth rate* is substituted for market share, defined (in turnover) as :-

$$r_n = g_n - i \quad . \qquad \text{Eqn. (2.2)}$$

In equation *2.2*, g_n denotes the sales growth rate for firm n, and i the industry sales growth rate. The residual growth rate (r_n) is therefore equal to the *net* growth rate between the incumbent n and the industry. Where the firm experiences growth in excess of the industry average, the residual growth rate for that firm is positive and vice versa. Importantly, using the residual growth rate across a classification of firms - according to firm size - provides the means to compare the performance of each class.

The expectation is that firms in order to survive will migrate from any inefficient class to the efficient class. The migration of firms from one size class to another is referred to as *inter-class migration.* In the non-presence of inter-class migration, *intra-class migration* - migration within a class - gives an insight into the stability of class membership.

Table *2-6* records the residual growth rates and initial firm displacement - in terms of firm size - in Scottish knitwear manufacture for *1984.* Table *2-7* provides the equivalent data for *1988*, alongside information on the extent of intra- and inter-firm migration responsible for the *1988* firm displacement. Firm entry and exit from the industry is also highlighted.

Employment in the firm, as a proportion of total industry employment (Z_n), is used to standardise the measurement of firm size. Setting the *class width* is a major weakness of any survivor approach because of the arbitrary method of selection [Shepherd (1967)]. Therefore 'natural' boundaries - where there are obvious breaks in the size ordering of incumbent firms - are used in table *2-6* to differentiate between size classes of firms. The actual class widths are :

class 1 - (0-0.49)%;
class 2 - (0.5-0.99)%;
class 3 - (1.0-1.49)%;
class 4 - (1.5-1.99)%;
class 5 - (2.0-3.99)%;
class 6 - (4.0-7.99)%;
class 7 - (8.0-)%.

Table 2-6 : Tracking Firms in Scottish Knitwear Manufacture (1984).

Firm Type	$Z_n(84)$ (%)	$r_n(84)$ (%)
Ferguson Knitwear	0.12	3.30
D.C. Dalgliesh	0.23	-15.10
Bute Fabrics	0.39	-11.17
Class 1 : incumbents = 3	**0.25**	**-7.66**
Speyside & Cairngorm	0.73	3.36
Harrott & Co.	0.82	-14.13
The Woolly Mill	0.92	2.01
Class 2 : incumbents = 3	**0.82**	**-2.92**
Kyle Knitwear	1.10	4.51
Murray Allan	1.12	-6.43
Strathclyde Knitwear	1.19	4.34
Lovat Enterprises	1.19	-0.57
Glenhusky of Scotland	1.21	-1.92
James Pringle	1.45	60.29
Class 3 : incumbents = 6	**1.21**	**10.04**

A. MacDougall & Co.	1.58	-39.47
T. MacKie & Sons	1.65	-3.98
Glenmac Knitwear	1.67	-11.59
Lochcarron J. Buchan	1.71	11.43
Class 4 : incumbents = 4	**1.65**	**-10.90**
Hodgson of Scotland	2.11	15.15
R. Laidlaw & Sons	2.39	1.05
Peter Scott & Co.	2.82	3.61
Thomas Smith & Co.	2.83	-4.64
Class 5 : incumbents = 4	**2.54**	**3.79**
J. & D. McGeorge	4.47	10.71
Barrie Knitwear	4.53	-3.64
Scottish Worsted & Woollens	5.07	-24.76
The Ballantyne Sportswear Co.	6.85	-7.64
Campsie Knitwear	7.31	40.85
Class 6 : incumbents = 5	**5.65**	**3.10**
The Edinburgh Wollen Mill	8.53	-5.74
S.H. MacKinnon & Co.	9.04	57.64
E.W.M. Investments	11.63	0.53
Pringle of Scotland	15.32	-4.18
Class 7 : incumbents = 4	**11.13**	**12.06**

Table 2-7 : Tracking Firms in Scottish Knitwear Manufacture (1988).

Firm Type	$Z_n(88)_{(\%)}$	$r_n(88)_{(\%)}$	Intra-Class Migration (%)	Inter-Class Migration (%)
Lovat Enterprises	0.06	3.21	--	-94.96 (20,3)
Ferguson Knitwear	**	**	**	**
D.C. Dalgliesh	0.19	7.90	-17.39 (28)	--
Class 1 : incumbents = 2	**0.13**	**5.56**	**17.39 (-)**	**94.96 (-)**
Bute Fabrics	0.66	29.45	--	69.23 (27,1)
Speyside & Cairngorm	0.73	-1.45	0.00 (26)	--
Harrott & Co.	0.76	10.35	-7.32 (25)	--
The Woolly Mill	0.79	-10.00	-14.13 (24)	--
Class 2 : incumbents = 4	**0.74**	**7.09**	**7.15 (-)**	**69.23 (+)**
Glenhusky of Scotland	1.09	-12.38	-9.92 (19)	--
Strathclyde Knitwear	1.10	29.87	-7.56 (21)	--
Kyle Knitwear	1.28	14.47	16.36 (23)	--
Murray Allan	1.35	25.47	20.54 (22)	--
Class 3 : incumbents = 4	**1.21**	**14.36**	**13.6 (+)**	**--**

A. MacDougall & Co.	**	**	**	**
T. MacKie & Sons	1.63	9.86	-1.21 (16)	--
R. Laidlaw & Sons	1.94	35.43	--	-18.82 (12,5)
Class 4 : incumbents = 2	**1.79**	**22.65**	**1.21 (-)**	**18.82 (-)**
Lochcarron J. Buchan	2.11	34.47	--	23.39 (14,4)
James Pringle	2.29	1.59	--	57.93 (18,3)
Glenmac Knitwear	2.52	6.31	--	50.90 (15,4)
Thomas Smith & Co.	2.71	9.53	-4.24 (10)	--
Peter Scott & Co.	3.35	9.62	18.79 (11)	--
Hodgson of Scotland	3.36	23.77	59.24 (13)	--
Campsie Knitwear	3.74	-10.97	--	-48.83 (5,6)
Class 5 : incumbents = 7	**2.87**	**10.62**	**27.42 (+)**	**45.26 (+)**
Barrie Knitwear	4.36	5.49	-3.75 (8)	--
Scottish Worsted & Woollens	5.16	6.14	1.78 (7)	--
J. & D. McGeorge	5.21	-14.81	16.55 (9)	--
The Ballantyne Sportswear Co.	7.18	23.00	4.82 (6)	--
Class 6 : incumbents = 4	**5.48**	**4.96**	**6.73 (+)**	--
S.H. MacKinnon & Co.	**	**	**	**
The Edinburgh Wollen Mill	10.82	-11.20	26.84 (4)	--
E.W.M. Investments	15.90	-12.35	36.72 (2)	--
Pringle of Scotland	18.42	0.81	20.23 (1)	--
Class 7 : incumbents = 3	**15.05**	**-7.58**	**27.93 (+)**	--

** exit from the industry

Notes : Intra-class migration is denoted by the 1984 size order of the firm (a); inter-class migration by the 1984 size order and class (a,b).
Intra- and inter-migration for each class - an average of the modulus of corresponding firm migrations - is denoted by the balance of the migration (+/-).

On the basis of inter-class migration, class *5* is the most likely candidate for the 'efficiency' label. Despite losing one firm to a class *4* level of operations; in the period 1984-88, four firms - three through expansion, one by rationalisation - migrated to a level of operations in keeping with class *5*. This would place the efficient class at *(2-4)* per cent of the total industry; between *160* and *320* employees. Certainly the growth performance of class *5* corroborates this conclusion, albeit the extent of intra-class migration suggests future instability in its membership.

2.4.5 Limited Dependent Models and Survivor Analysis

This review of survivor analysis concludes with the most recent work on the subject; namely, the application of *limited dependent modelling* as an alternative survival technique. The theoretical stimulus for this phenomenon can be attributed to the development of *firm exit models*, early examples of which include Riley (1980) and Milgrom and Weber (1982)[13].

Lieberman (1990) and Mobley and Frech (1994) looked at exit models based on the premise of falling demand conditions[14]. More importantly, both papers estimate probit and tobit models - for Lieberman (1990) US chemical products and for Mobley and Frech (1994), the Californian hospital market provide the data sources - to test a number of theoretical conclusions.

Using terminology in this thesis, for each incumbent firm i in industry N :-

$$S_{iN} = F(\beta_0, \beta_1 r_{iN}, \beta_2 \Delta r_{iN}, \beta_3 \Delta Z_{iN}, \beta_4 KL_{iN}, \beta_5 CRn_N, \beta_6 ASR_N, \beta_7 IP_N),$$

where, (S_{iN}) is a binary indicator of survival $(S_{iN} = 0)$; on exit from the industry $(S_{iN} = 1)$. The independent variables - *firm- and industry-specific* - are :-

r_{iN}	-	residual growth rate,
Δr_{iN}	-	change in the residual growth rate,
ΔZ_{iN}	-	modulus of the change in firm size,
KL_{iN}	-	capital-labour ratio,
CRn_N	-	concentration ratio,
ASR_N	-	advertising intensity,
IP_N	-	import penetration.

Estimating equation *2.3*, a *logit model* for a set of industries, and substituting the parameter estimates :-

$$L_{iN} = \ln\left(\frac{P_{iN}}{1 - P_{iN}}\right) = \beta_0 + \beta_1 r_{iN} + \beta_2 \Delta r_{iN} + \beta_3 \Delta Z_{iN} + \beta_4 KL_{iN} + \beta_5 CRn_N + \beta_6 ASR_N + \beta_7 IP_N \quad \text{Eqn. (2.3)}$$

where, (L_i) denotes the natural log of the *odds ratio* $(P_i/1-P_i)$, enables the identification of a possible minimum efficient size class *(m.e.s.c)*. The odds ratio measures the probability (P_i) of a firm withdrawing from the industry. For example, values of *0.75* and *0.25* for (P_i) and $(1-P_i)$ respectively, would mean an odds ratio equal to *3* for firm *i*. The odds are *3* to *1* that firm *i* will exit the industry, hence the reference to an *odds* ratio. The *m.e.s.c.* is that size class with the smallest mean odds ratio.

2.5 The Ordinary Regression Model (ORM)

The traditional or classical approach to econometric estimation in industrial organisation (IO) was the *cross-industry regression* (CIR). There remain some links between this and modern techniques of panel data analysis. One such link is the comparison that can be made between the CIR approach and the *ordinary regression model* (ORM), the most basic panel data model. While the CIR pools a cross-section of data for one interval of time, the ORM pools a cross-section of data for a series of time intervals.

2.5.1 The ORM and Cross-Industry Regressions (CIRs)

It follows that the ordinary regression model (ORM) and cross-industry regression (CIR) are similar techniques of estimation. The CIR methodology, denoted by :-

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \ldots + \beta_k X_{ki} + u_i \ , \qquad \text{Eqn. (2.4)}$$

or more compactly, in matrix form by :-

$$\underset{(n \times 1)}{\mathbf{y}} = \underset{(n \times k)}{\mathbf{X}} \ \underset{(k \times 1)}{\boldsymbol{\beta}} + \underset{(n \times 1)}{\mathbf{u}} \ , \qquad \text{Eqn. (2.5)}$$

for n industries and k regressors, *assumes uniformity or stability in parameters across the industry set* $(\beta_{ki} = \beta_k)$. With the ORM this assumption is extended to include not only cross-industry uniformity, but also time-series uniformity in the parameters. Therefore underlying the ORM is the presumption of *no heterogeneity* in the parameters for the whole panel of observations $(\beta_{kit} = \beta_k)$.

Using appropriate notation then, the ORM is represented as :-

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \ldots + \beta_k X_{kit} + u_{it} \,, \qquad \text{Eqn. (2.6)}$$

or :-

$$\underset{(nt \times 1)}{\mathbf{y}} = \underset{(nt \times k)}{\mathbf{X}} \; \underset{(k \times 1)}{\boldsymbol{\beta}} + \underset{(nt \times 1)}{\mathbf{u}} \,, \qquad \text{Eqn. (2.7)}$$

where t specifies an interval in time.

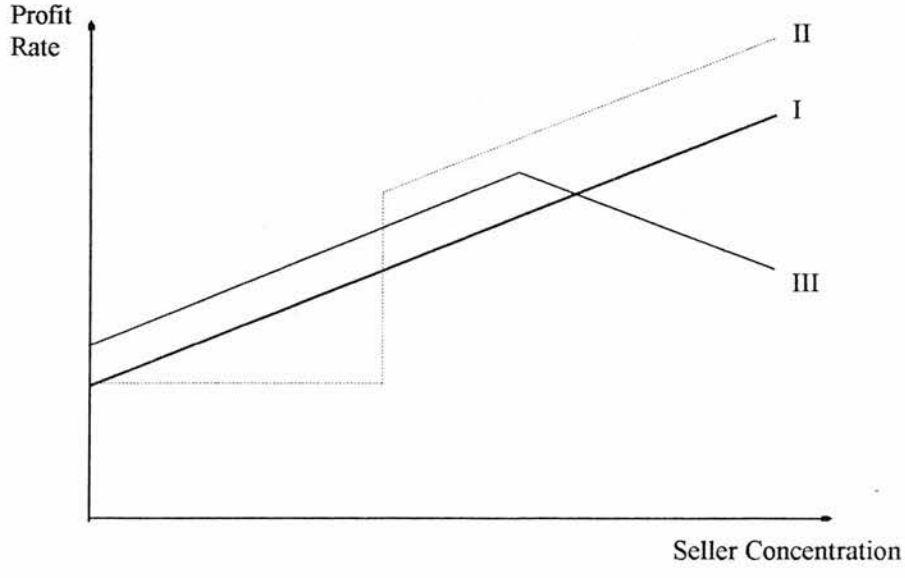
Despite the non-presence of heterogeneity being a tenuous assumption[15] [Davies (1994)], a number of advantages do emerge from the ORM specification. The ordinary regression model makes use of all the observations in the panel to estimate the set of industry parameters. In comparison with the CIR specification, the researcher is provided with many more degrees of freedom. An important second advantage is that ordinary least squares (OLS) estimators are BLUE for ORM applications [Greene (1991)].

2.5.2 Classical Industrial Organisation : "A Priori" Relationships and the CIR Methodology

In chapter *1*, the discussion of the literary development of classical IO referred to certain "a priori" relationships between structure and performance. Before estimating the ORM then, it remains necessary to review this set of "a priori" relationships, particularly their underlying theory. Previous tests of these 'a priori' relationships using the CIR methodology are also examined.

Historically, one of the least contentious of these 'a priori' relationships is the hypothesised link between *seller concentration* and *industry profits*. Fewer firms in an industry must mean ceteris paribus greater profit margins. As the market power of a firm increases we would expect that the ability of the firm to control, and increase the industry price level is enhanced. A *proportional causal relationship* running from seller concentration to industry profits is consistent with schedule *I* in figure *2-5*. :-

Figure 2-5 : Hypothetical Seller Concentration-Profit Relationships[16].

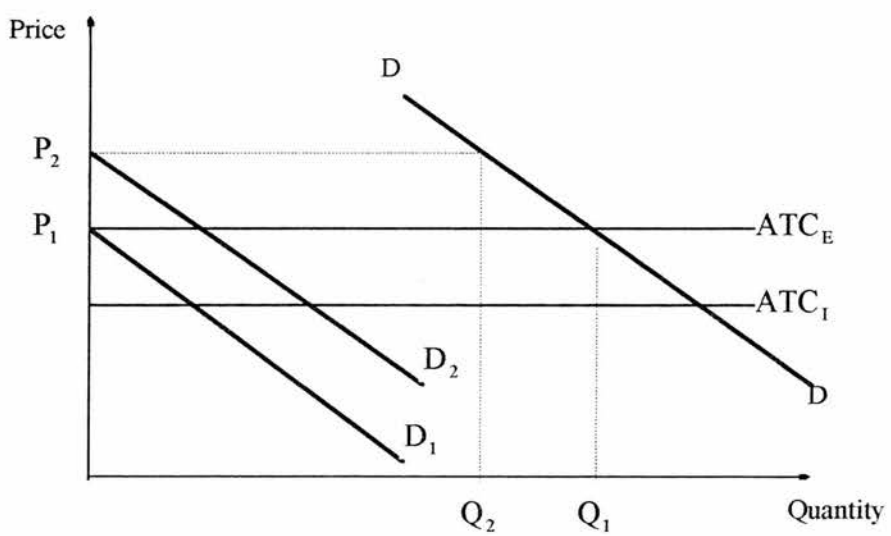


Nevertheless, the concentration-profit relationship has - on empirical testing - been shown to be more enigmatic than originally thought [Devine (1985)]. For example, its exact nature is unlikely to be continuous. Schedule *II* summarises a possible *threshold relationship* where increasing concentration levels only affect industry profits beyond a certain point [Dalton and Penn (1976)]. The possible effects of anti-trust legislation and government intervention in industry are given in schedule *III*. Firms perceive that high concentration levels encourage third-party intervention and respond by limiting price-cost margins.

Moreover, oligopolists may decline profit maximisation in favour of sales growth [Baumal (1959) and Marris (1964)], technological leadership [Freeman (1982)] and takeover objectives [George and Silberston (1975)]. These alternative strategies are all consistent with the concentration-profits relationship depicted in schedule *III*.

For a number of the remaining structure-performance relationships[17], 'a priori' expectations are dominated by the *Sylos postulate* and the role of *barriers to entry*. The Sylos postulate contends that prospective entrants expect industry incumbents to maintain output levels in the face of new entry [Reekie (1979)]. What this implies for new entrants is illustrated in figure *2-6*, where *DD* represents the industry demand schedule. :-

Figure 2-6 : The Sylos Postulate[18].



The industry price-output combination is (P_1, Q_1). On entry, the Sylos postulate ensures that the industry price (P_1) must fall by a sufficient amount to clear both industry output (Q_1), and that which is produced by the entrant. The *effective or residual demand schedule* for the entrant is therefore $(P_1 D_1)$.

Denoting (ATC_E) and (ATC_I) as the average total cost curves for the entrant and incumbents respectively, the presumption is that $[ATC_E > ATC_I]$. A number of reasons may account for this discrepancy; for example, *penetrative advertising costs* are borne only by an entrant to an advertised market [Comanor and Wilson (1967)]. This cost disadvantage would be sufficient to prevent entry at (P_1D_1). The height of the entry barrier is $[P_1 - ATC_I]$, the entry-deterring price minus incumbency average costs. An industry price-output combination (P_2, Q_2) however, would continue to encourage entry until the industry price matches the entry-deterring price (P_1).

Where entry barriers do exist then, the Sylos postulate identifies "the maximum premium that oligopolists can command over the competitive price" [Modigliani (1958)]. Although figure *2-6* examines the effects of *advertising barriers to entry*, it is easily adapted to economies of scale[19] [Reekie (1979)]. Certainly the effects of each class of entry barrier are equivalent, in that the 'a priori' expectation is incumbents can raise the industry price in direct proportion to the height of the entry barrier, the practice of limit pricing.

A number of commentators have challenged this conclusion. 'A priori' arguments can certainly be made against the entry barrier hypothesis. For example, advertising is an instrument of competition in a product differentiated industry. Advertised heterogeneity in the product range is likely to encourage entry, as the entrant can readily develop a niche market. Similarly, economies of scale determine the size of firms in an industry, and should not be thought of as entry barriers. Brozen (1969) endorses this conclusion, arguing that an entrant would fail to enter a perfectly competitive industry, as the long-run capacity level acts as an entry barrier. The entry barrier hypothesis is therefore overstated.

Finally, import penetration is an important structural variable. Although the domestic market may remain uncontested from a domestic source, the threat or presence of foreign penetration is sufficient to depress domestic profit levels. In the presence of foreign competition then, the domestic monopolist may be forced to behave similar to a competitive oligopolist.

Important attempts to verify these 'a priori' structure-performance relationships using (CIR) methods and United Kingdom data sources are reviewed in table *2-8*. The investigations are ordered by year of publication. :-

Table 2-8 : UK Studies of Structure-Performance Relationships[20].

Study	Profit Measure	Concentration	Advertising	Economies of Scale	Imports	Growth
J. Khalilzadeh-Shirazi (1974)	Π/S	*insig.*	(+)	(+)	*insig.*	*insig.*
Caves *et al.* (1975)	Π/S	?	(+)	(+)	*insig.*	(+)
P. Hart & E. Morgan (1977)	Π/S	*insig.*	(+)	*insig.*[a]	*insig.*	*insig.*
S. Nickell & D. Metcalf (1978)	Π/S	(+)	(+)	*insig.*[a]	*n.inc.*	*insig.*
T. Hitiris (1978)	Π/S	(+)	*insig.*[a]	*n. inc.*	(-)	*n. inc.*
M. Waterson (1980)	Π/S	(+)	*n. inc*	*n. inc.*	*n. inc*	*n. inc*
P. Geroski (1981)	Π/S	*insig.*	(+)	*n. inc.*	(-)	*n. inc.*
P. Geroski (1982)	Π/S	*insig.*	(+)	*n. inc.*	(-)	?
R. Clarke (1984)	Π/S	*insig.*	*insig.*	*n. inc.*	*insig.*	(+)

Π/S profit-sales ratio.
n.inc. not included.
insig. insignificant at the *5* per cent level of significance (one-tailed test).
? sign-changing.

insig.[a] negative insignificant sign.

Generally speaking, all of the 'a priori' structure-performance relationships are confirmed in table *2-8*. Concentration and import penetration have the desired signs, with a number of studies achieving a *5* percent level of significance. Ample evidence also exists for the entry barrier hypothesis, although much of it is weighted towards the presence of advertising barriers. Nevertheless, two from four studies do support the hypothesis that economies of scale act as entry barriers. Perhaps more significant however is that the remainder support the Brozen (1969) hypothesis, albeit at an insignificant level. There is also some evidence for the argument that high growth industries are amongst the most profitable[21].

2.5.3 Scottish Industry : An Ordinary Regression Model

Table *2-9* reviews estimation results from two[22] ordinary regression models using Scottish industry data. Actual specification is :-

$$\frac{\Pi_{it}}{S_{it}} = \beta_0 + \beta_1 CR3/5_{it} + \beta_2 ASR_{it} + \beta_3 MES_{it} + \beta_4 MP_{it} + \beta_5 g_{it} + \beta_6 ARP_{it} + u_{it}, \quad \text{Eqn. (2.8)}$$

where, the profit-sales ratio is denoted by (Π/S). The independent variables are :-

$CR3/5_{it}$ - 3-firm/5-firm concentration ratio,

ASR_{it} - advertising intensity,

MES_{it} - minimum efficient size (scale economies),

MP_{it} - import penetration,

g_{it} - sales growth rate,

ARP_{it} - average revenue product.

Table 2-9 : Estimates from ORMs using Scottish Industry Data (1983-88).

Explanatory Variable	Regression (1)	Regression (2)
Intercept	0.847 (0.854)	-0.623 (-0.536)
Concentration	0.085 (4.755)*	0.093 (5.356)*
Advertising Intensity	-1.118 (-3.321)*	-1.199 (-3.748)*
Scale Economies	-0.106 (-0.509)	-0.185 (-0.893)
Import Penetration	-1.742 (-2.643)*	-1.993 (-2.814)*
Sales Growth	0.013 (0.495)	0.019 (0.717)
Average Revenue Product	0.013 (1.145)	0.014 (1.244)
Sample Size	85[23]	85
Degrees of Freedom (*df*)	78	78
F-statistic	5.374**	5.813**
$\bar{R}^2$ - statistic	0.238	0.256
Serial Correlation	1.860	1.802
Functional Form (Ramsey RESET Test)	0.031	0.781

notes : Regressions (1) and (2) use the CR3 and CR5 measures of concentration respectively. *t*-statistics are denoted by parentheses.
The *t*-statistics have been corrected for the presence of heteroscedasticity using the White (1980) technique.

* & ** indicates that the coefficient is statistically significant at the *1* and *10* per cent level respectively (one-tailed test).

Both regressions confirm 'a priori' expectations of the effect increased concentration has on industry profits. The mechanism, that the market power of incumbent firms is a direct function of industry concentration is also upheld by this result. The entry barrier hypothesis, at least the hypothesised role of product differentiation and economies of scale, is not supported by this study. On the contrary, the negative sign of the advertising parameter endorses the positive view of advertising expenditure, as an important element of strategic competition and exploiting the consumer's role as a choice entrepreneur [Kirzener (1974), Telser (1964)]. The scale economies parameters are statistically insignificant confirming the Brozen hypothesis that they do not contribute to profit levels. Although this result agrees with studies by Hart and Morgan (1977) and Nickell and Metcalf (1978), any conclusion on the role of scale economies must be qualified by measurement difficulties.

Import penetration as a proxy for foreign competition in the domestic market is also supported by this study. In this respect, there is agreement with seminal work by Geroski (1981,1982). However, there is no evidence however for any association between dynamic efficiency in the firm (growth rates) and static efficiency (profit levels). This is true also of partial productivity, as measured by the average revenue product of labour and industry profit levels.

2.6 Concluding Remarks - Weaknesses in Classical IO Estimation

The cross-industry and ordinary regression models are equivalent, in that they both assume homogeneity in their parameters across industry (CIR) and for the whole panel (ORM). Many commentators have questioned and rejected this assumption [Davies (1994)]. In fact, the story of empirical estimation in Classical industrial organisation is one of increasing concern with these methods.

The treatment of industries as comparable units of study is no longer tenable within empirical IO. Rather, we must assume that each industry has any number of unique characteristics, each of which may impinge upon industry profitability. Short of a *case-study approach*, this thesis estimates a set of *industry-specific parameters* and then looks to identify those factors that may account for an industry-specific paradigm of profit.

[1]Hirschman, A.O. (1964). The Paternity of an Index. *American Economic Review* 54, pp. 761-762.

[2]For other *summary measures*, see Hannah and Kay (1977), Jacquemin and de Jong (1977) and Hart and Prais (1956).

[3]Excludes the year 1986.

[4]With a few marginal exceptions, the CR3, CR5 and HHI concur on the relative concentrations of Scottish industry.

[5]See Reid, G.C. *Theories of Industrial Organisation*, pp. 11-33.

[6]MEAL publishes data on Scottish television advertising expenditure.

[7]For an insight into total factor productivity, see Fare *et al.* (1993), Chau and Walker (1993) and Coelli (1996).

[8]See Sawyer, M. C. (1985). *The Economics of Industries and Firms*, for a more detailed review of the *m.e.s.* of production.

[9]The prescription of survivor analysis is that we should observe the least-cost incumbents succeeding in terms of market share through time (see above).

[10]The reader should be aware that the survivor approach cannot fail to identify an efficient size class. An increase in the market share of one class of firms must be at the expense of the remainder of incumbents.

[11]The plant-firm ratio is equal to one for the smallest quartile of firms in Scottish manufacturing industry. In tertiary industries it is a less relevant concept. For example, with vehicle distribution a multi-franchising organisation is a prerequisite for the competitive survival of the company; certainly in the national Scottish market.

[12]See Chapter 6 for a discussion of the role of the business cycle in intra-industry effects.

[13]Both papers modelled firm exits as a random phenomenon.

[14]Other exit models rely on cost conditions and relative efficiency between industry incumbents.

[15]The presence of heterogeneity in cross-industry parameters is the central tenet of this research thesis.

[16]Reproduced from Devine *et al.* (1985). *An Introduction to Industrial Economics*, 4th Edition. Unwin Hyman Ltd.

[17]Economies of scale and advertising.

[18]Reproduced from W.D. Reekie (1979). *Industry, Prices and Markets*. Philip Allan.

[19]See figure 3-1.

[20]Reproduced from Sawyer M.C. (1985). *The Economics of Industries and Firms*, 2nd Edition, Croom Helm Ltd. and Hay D.A. & Morris D.J. (1991) *Industrial Economics and Organisation*, 2nd Edition, Oxford University Press.

[21]Profitability and growth are both indicators of efficiency in the firm, and typically occur in pairs.

[22]A three- and five-firm concentration ratio respectively denotes each model.

[23]The sample size is equal to eighty-five (17 industries for the years 1984-88). The use of annual sales growth as a regressor disallows data from 1983.

Chapter 3 The General Covariance Model (GCM) and Industry-Specific Effects

3.1 Introduction : Industry-Specific Effects

The presence of *industry-specific effects* seriously weakens the cross-industry regression methodology. Industry-specificity must mean heterogeneity in the relationship between industry structure and profit, disqualifying the use of cross-industry parameters [Schmalensee (1989a)]. For example, *indigenous institutional* and *behavioural factors* within each industry ensure that two sets of industry incumbents react differently to an identical concentration level [Davies (1994)].

Another stylised fact of the CIR methodology is the generally low degree of explanation. The ordinary regression models (ORMs) for Scottish industry, estimated in chapter *2* are no exception. Both models fail to account for approximately *75* per cent of the variance in industry profit. The only conclusion is that other factors, outside the remit of the Classical structure-performance specification partly determine industry profits. Moreover, it is logical to argue that the source to this unexplained profit variation lies with the indigenous institutional and behavioural factors mentioned above. Investigating the most likely indigenous institutional and behavioural factors is the centrepiece of this thesis.

3.2 Covariance Models (CMs)

Before examining these factors however, it is necessary to estimate the industry-specific effects in Scottish industry using a *covariance model* [Balestra (1994)]. Otherwise referred to as *analysis-of-covariance models*, they share the common property that the dependent variable is both a function of genuine exogenous variables, and the class to which the *individual* (industry) belongs [Chow (1992)]. This *mixed character* status ensures that covariance models are ideal for estimating industry-specific effects. For example, an *industry-specific covariance model* (ISCM) for N industries is written as :-

$$\frac{\Pi_{it}}{S_{it}} = \sum_{j=1}^{N} \delta_j a_i + \beta' x_{it} + u_{it} \qquad \text{Eqn. (3.1)}$$

$(1\times K)(K\times 1)$

where, $\delta_j = 1$ if j is equal to i,

$\delta_j = 0$ otherwise.

The value of industry profits (Π_{it}/S_{it}) for industry i in period t depends on K exogenous variables - the structural regressors - as well as those variables specific to the i'th industry. The effect of these variables is represented by the *scalar product* $(\delta_i a_i)$.

3.2.1 The General Covariance Model (GCM)

The *general covariance model* (GCM) for industry is a wider specification than the industry-specific covariance model, and so is favoured in practice. The inclusion of v time-specific in addition to N industry-specific effects means that the GCM is represented as :-

$$\frac{\Pi_{it}}{S_{it}} = \sum_{j=1}^{N} \delta_j a_i + \sum_{s=1}^{v} \gamma_s q_t + \beta' x_{it} + u_{it} \quad , \qquad \text{Eqn. (3.2)}$$

$$(1\times K)(K\times 1)$$

where, $\delta_j = 1$ if j is equal to i,

$\delta_j = 0$ otherwise.

$\gamma_s = 1$ if s is equal to t,

$\gamma_s = 0$ otherwise.

The empirically implemented version of equation *3.2* is written as :-

$$\frac{\Pi_{it}}{S_{it}} = \sum_{j=1}^{N-1} \delta_j a_i + \sum_{s=1}^{v-1} \gamma_s q_t + c + \beta' x_{it} + u_{it} \quad , \qquad \text{Eqn. (3.3)}$$

$$(1\times K)(K\times 1)$$

which, entails the substitution of an industry- and time-specific parameter by a constant term c. Equation *3.2* is subject to collinearity in the industry-specific parameters, hence the requirement for the modification in *3.3* [Balestra (1994)].

3.2.2 Scottish Industry : A General Covariance Model

Table *3-1* reviews estimation results from two[1] general covariance models (GCMs) using Scottish industry data. The exact specification is :-

$$\frac{\Pi_{it}}{S_{it}} = \beta_0 + \beta_1 CR3/5_{it} + \beta_2 ASR_{it} + \beta_3 MES_{it} + \beta_4 MP_{it} + \beta_5 g_{it} + \beta_6 ARP_{it} + \sum_{j=1}^{16} \delta_j a_i + \sum_{s=1}^{4} \gamma_s q_t + u_{it} \quad \text{Eqn. (3.4)}$$

where, the profit-sales ratio (Π_{it}/S_{it}) is explained by the set of structural regressors :-

$CR3/5_{it}$	-	*3*-firm/*5*-firm concentration ratio,
ASR_{it}	-	advertising intensity,
MES_{it}	-	minimum efficient size (scale economies),
MP_{it}	-	import penetration,
g_{it}	-	sales growth rate,
ARP_{it}	-	average revenue product,

and the set of specific *fixed effects* :-

$\sum_{j=1}^{16} \delta_j a_i$	-	industry-specific effects for *16* industries,
$\sum_{s=1}^{4} \gamma_s q_t$	-	time-specific effects for *4* years (1984-87).

In accordance with the Balestra (1994) specification it is necessary to arbitrarily remove an industry- and time-specific parameter (see above). Therefore, the fixed effect parameters for *general haulage* and *1988* are not included in table *3-1*. Note that it is normal practice to exclude the time-specific effect for the final interval in the panel dataset.

Table 3-1 : Estimates from the GCMs using Scottish Industry Data (1984-88).

Explanatory Variable	**Regression (1)**	**Regression (2)**
Intercept	-1.118 (-0.532)	-2.774 (-0.775)
Concentration	0.181 (3.477)*	0.183 (2.153)*
Advertising Intensity	-0.227 (-0.676)	-0.074 (-0.212)
Scale Economies	0.004 (0.034)	0.043 (0.313)
Import Penetration	0.429 (0.851)	0.347 (0.649)
Sales Growth Rate	0.026 (1.450)**	0.027 (1.394)**
Average Revenue Product	-0.019 (-0.591)	-0.029 (0.034)

Industry-Specific Effects (ISEs)		
Industrial Rubber Manufacture	-8.596 (-2.747)*	-8.595 (-1.783)*
Electronic Component Manufacture	-8.422 (-2.607)*	-7.310 (-1.585)**
Slaughterers and Meat Processors	-6.358 (-3.054)*	-6.502 (-2.421)*
Services to the Oil Industry	-6.041 (-2.720)*	-8.331 (-2.058)*
Steel Merchants	-4.091 (-1.176)	-5.081 (-1.109)
Textile Manufacture	-3.943 (-1.394)**	-4.123 (-0.910)
Plant Hire	-3.474 (-1.812)*	-3.009 (-1.150)
Builders' Merchants	-3.44 (-1.863)*	-4.022 (-1.553)**
Industrial Valve Manufacture	-2.596 (-1.032)	-3.719 (-0.864)

Building Contractors	-1.565 (-1.590)**	-1.210 (-1.151)
Vehicle Distribution	-1.232 (-0.474)	-0.578 (-0.210)
Petroleum Product Distribution	-0.837 (-0.126)	-0.505 (-0.072)
Knitwear Manufacture	-0.143 (-0.103)	-0.263 (-0.130)
Timber Merchants	-0.030 (-0.025)	-0.146 (-0.114)
Paper Manufacture	0.367 (0.229)	-0.903 (-0.326)
Whisky Distilling	7.494 (2.558)*	7.951 (2.405)*

Time-Specific Effects (TSEs)		
Year 1 (1984)	-0.762 (-1.078)	-0.916 (-1.229)
Year 2 (1985)	-0.731 (-1.269)	-0.754 (-1.232)
Year 3 (1986)	-0.618 (-1.096)	-0.734 (-1.234)
Year 4 (1987)	-0.804 (-1.703)*	-0.861 (-1.723)*

General Statistics		
Sample Size	85	85
Degrees of Freedom (df)	58	58
F-statistic	21.987	19.412
$\bar{R}^2$ - statistic	0.867	0.851
Serial Correlation	0.147	0.208
Functional Form	1.776	0.725
Heteroscedasticity	0.003	0.052

notes : Regressions (1) and (2) use the CR3 and CR5 measures of concentration respectively.
t-ratios are denoted by parentheses.

* Indicates that the coefficient is statistically significant at the *5* per cent level (one-tailed test).

** Indicates that the coefficient is statistically significant at the *10* per cent level (one-tailed test).

Industry-specific effects are in ascending order in terms of regression *1*.

Both regressions demonstrate a relatively high $\overline{R}^2$ statistic. Rather than an explained variance for industry profits of *30* per cent with an ordinary regression model (table *3-9*); estimating a GCM increases the level of explanation to nearer *90* per cent. This is natural condition of any regression where the number of parameter estimates approaches the number of observations [Greene (1991)].

A salient feature of the GCM, more precisely the industry- and time-specific parameters, is that they represent the influence on industry profits *after controlling for industry concentration along with the other structural regressors* [Chow (1992)]. This means that there is a greater likelihood of homogeneity in the cross-industry parameters using a GCM than with CIRs or ORMs. More specifically, the time-specific parameters control for :-

1. common business cycle factors,
2. idiosyncratic firm- and industry-specific factors that are sensitive to the business cycle.

Chapter *4* considers the role of the business cycle in greater depth by estimating industry-per-time-period specific models.

Finally, of the 'a priori' expectations discussed in *2.5.2*, only the relationship between industry concentration and profits is upheld in table *3-1*. There is also some evidence that firm success may be measured in terms of both profit and sales growth.

3.3 Industry-Specific Effects in Scottish Industry

The industry-specific effects from table *3-1* are central to this thesis. The remainder of this chapter reviews the nature of these industry-specific effects along with their component parts; underlying disparate factors, indigenous to each industry. This provides an introduction to the central chapters of this thesis, which attempt to identify patterns in underlying factors that may account for the overall distribution in industry-specific effects and industry profit.

3.3.1 Industry-Specific Effects : Stylised Facts

Taken together, the singular conclusion consistent with the set of Scottish industry-specific effects is that they exhibit an *idiosyncratic quality* [Katics and Petersen (1994)]. This observation is certainly supported by the literature [Schmalensee (1989a), Currie and McConnell (1992), Schol (1993)], as all industry-specific effects have this common property.

Comparing an industry-specific effect with another in table *3-1* would represent a meaningless exercise. For comparison purposes, the *net industry-specific effect* (NISE), equal to the industry-specific effect minus the mean industry-specific effect is relevant. Any industry-specific effect for industry *i* must be measured as (say) constant for industry *j* minus the mean intercept (mean industry-specific effect). Table *3-2* lists the net industry-specific effects (ISEs) for each industry alongside the adjusted *t*-ratios.

Table 3-2 : The Set of Net Industry-Specific Effects (NISEs).

Net Industry-Specific Effects	Regression (1)	Regression (2)
Industrial Rubber Manufacture	-5.914 (-1.890)*	-5.698 (-1.182)
Electronic Component Manufacture	-5.740 (-1.777)*	-4.413 (-0.957)
Slaughterers and Meat Processors	-3.676 (-1.766)*	-3.605 (-1.342)**
Services to the Oil Industry	-3.359 (-1.512)**	-5.434 (-1.342)**
Steel Merchants	-1.409 (-0.405)	-2.184 (-0.477)
Textile Manufacture	-1.261 (-0.446)	-1.226 (-0.271)
Plant Hire	-0.792 (-0.413)	-0.112 (-0.043)
Builders' Merchants	-0.758 (-0.411)	-1.125 (-0.434)
Industrial Valve Manufacture	0.086 (0.034)	-0.822 (-0.191)
Building Contractors	1.117 (1.135)	1.687 (1.605)**
Vehicle Distribution	1.450 (0.558)	2.319 (0.843)
Petroleum Product Distribution	1.845 (0.278)	2.392 (0.341)
Knitwear Manufacture	2.539 (1.829)*	2.634 (1.302)
Timber Merchants	2.652 (2.210)*	2.751 (2.148)*
Paper Manufacture	3.049 (1.903)*	1.994 (0.720)
Whisky Distilling	10.176 (3.473)*	10.848 (3.281)*

* Indicates that the coefficient is statistically significant at the *5* per cent level (one-tailed test).

** Indicates that the coefficient is statistically significant at the *10* per cent level (one-tailed test).

Industry-specific effects are in ascending order in terms of regression *1*.

Table *3-2* describes a range of net ISEs from industrial rubber manufacture to whisky distilling, a profit range equal to *16.09* units (regression *1*). This thesis presumes then to analyse the *components* which account for the set of industry-specific effects and their idiosyncratic nature. These components may be broadly categorised as follows :-

1. Underlying factors or variables,
2. Measurement difficulties with certain variables.

Underlying variables - also known as the *missing variable phenomenon* [Katics and Petersen (1994)] - that may be responsible for the distribution of net ISEs forms the centrepiece of this research thesis. The following section lists those variables most likely to be responsible for the set of industry-specific effects.

Also transmitted to the set of net ISEs are *measurement errors* on structural regressors. Economies of scale, as estimated with survivor analysis is a typical source of measurement errors. Consistency in the survivor approach (see above) is therefore of paramount importance, as this provides the means to assume that any measurement errors are *consistent* and apply *proportionally across industries*. An equivalent assumption must be made for the remaining structural regressors.

3.3.2 Net Industry-Specific Effects : Underlying Factors

3.3.2.1 The Role of the Business-Cycle

The business cycle (or macroeconomy) is a significant factor in any explanation of industry profits. The *time-specific effects* in Table *3-1*, where the time-specific parameter for *1987* is statistically different from those for *1984-86*, is testimony to the time-series influence of the macroeconomy on a single industry's profit levels.

Furthermore, the influence of the business cycle will vary between industries. For example, the construction industries in the UK are generally believed by commentators to be *barometer industries*, experiencing recession and boom before manufacturing and service sectors [Akintole (1995)]. This may also be true of Scottish industries *building contracting*, *merchanting* and *plant hire*. Therefore industries may experience different profit conditions depending on their relative position on the business cycle. In the following chapter, the focus is on the estimation of *industry-per-time-period fixed effects models*. These models allow for tests of the *inequality* of industry profits at each interval of time, providing some evidence for a business cycle effect.

One caveat is the implicit assumption that the industry profit rate will behave identically over the business cycle for all the industries in the sample. This assumption that the industry-per-time-period specific effects reflect only the influence of the macroeconomy requires verification. For example, Domowitz, Hubbard and Petersen (1986,1988) found that while price-cost margins in concentrated industries are typically *procyclical* (rising in booms, falling in recessions), for less concentrated industries there was evidence of *countercyclical behaviour* (falling in booms, rising in recessions). Their reasoning was the presence of greater wage bargaining rigidity in concentrated industries during a boom phase.

Although the Domowitz *et al.* (1986,1988) findings, countered in Scherer (1980) and Bils (1987) are not directly relevant[2], the possibility remains that hereto *unmeasured variables* can affect industry profits differently between industries over time. As with industry-specific effects, *industry-per-time-period specific effects* may have equivalent underlying factors that are indistinguishable from the business cycle effect. These factors which form the focal point of chapters *5* and *6* in this research thesis, are listed below.

An alternative set of literature in the matter of macroeconomic factors (the business cycle) and industry profits revolves around the *capital asset pricing model (CAPM)*. Postulating that :-

$$\frac{\Pi_{it}}{S_{it}} = \beta_i (r_m - r)_t \ , \qquad \text{Eqn. (3.5)}$$

it follows that the profit-sales ratio for an industry is proportional to its *beta* via the *expected risk premium* $(r_m - r)$. An industry's beta is a measure of the sensitivity of the stock to movements in the market. An industry with a beta greater than one is unusually sensitive to market movements and is therefore regarded as a risky investment. Conversely, an industry with a beta less than one is less sensitive to market movements and a less risky investment. These same betas provide a proxy for a combination of macroeconomic factors including the business cycle.

The estimation of the set of industry betas does not form part of this research thesis. The main purpose behind its mention here is that it is an important avenue for further empirical work. For example, establishing a relationship between the set of industry betas and net ISEs would represent an important finding.

3.3.2.2 Variable Costs

Accountancy data has generally been overlooked by empirical industrial organisation to date, criticised on the grounds of its economic naiveness. However, a number of commentators now stress the importance of company reports as a source of *rich disaggregated data* on individual firms [Davies (1994)]. This research thesis endorses this optimistic opinion of accountancy data. It sets out to provide evidence of those factors which may be responsible for the set of net ISEs.

Factors which exert a strong influence on industry profits are the cost conditions facing industry incumbents. Company reports with information on the average *wage rate* and the *total wage bill*, provide the economist with the means to compare *variable cost conditions* across industries. In labour-intensive industries the *wage bill* - and changes in the wage bill - is a very important determinant of industry profit levels.

3.3.2.3 Assets and Liabilities

The *asset strength* or *debt weakness* of incumbent firms within an industry are significant determinants of industry profits. Accounting measures such as the *current ratio (CR)* :-

$$CR = \frac{\text{current assets}}{\text{current liabilities}} , \qquad \text{Eqn. (3.6)}$$

the *borrowing ratio (BR)* :-

$$BR = \frac{\text{Total Debt}}{\text{Net Worth}} , \qquad \text{Eqn. (3.7)}$$

and income gearing :-

$$\text{Inc.Gr.} = \frac{\text{Interest Payments}}{\text{Pre-Interest Profit}} \times 100 \ , \qquad \text{Eqn. (3.8)}$$

are useful for evaluating the financial security of the firm. Despite weaknesses in these ratios, they provide some notion of *debt servicing* in industries. Where debt servicing is significant, firm revenues will be increasingly directed to creditors in favour of profits to shareholders. There is therefore a strong 'a priori' link between profits and the firm's financial strength, measured by liabilities as a proportion of assets.

3.3.2.4 Alternative Underlying Factors

The *production process* across industries is another possible source of industry-specific effects in profit. Short of measuring the *total factor productivity* (TFP) of an industry, the *capital-labour ratio* (K/L) can deliver a partial insight into the production process. To cede to the sentiment of Davies (1994), using the accounting concept *fixed assets* as a proxy for capital employed is a helpful guide to the capital-intensity of production. While the depreciation charge is arbitrary, fixed assets remains an appraisal by the firm of the financial worth of its plant and machinery. A cross-comparison of capital-labour ratios across industries of some description is therefore possible.

Alternative factors which may be responsible for industry-specific effects and analysed in this thesis - which are well represented in company accounts - include export ratios and a *spatial analysis* of each industry. One of the major difficulties in empirical industrial organisation is to ascertain whether firms genuinely belong and compete within the same market (see Chapter *2*).

This phenomenon is referred to in the industrial organisation literature as the firm's *fixed market area* [Loesch (1954), Beckman (1970) and Stern (1972)]. Smaller and medium-sized firms may occupy market niches where they extract a higher rate of profit than other 'industry' incumbents.

3.3.2.5 Indigenous Industry Conduct

One final influence on industry profitability is the possible presence of *indigenous industry conduct*. A strong theoretical case is made for indigenous industry conduct in chapter *6*. Using game theory models, it is easy to demonstrate that not all firm conduct is necessarily conditioned by industry structure. An empirical argument is made for indigenous conduct by using *market share firm turbulence* - a proxy for dynamic interaction between incumbent firms. Finally, indigenous conduct and the set of net industry-specific effects are compared.

3.4 Conclusion

This chapter has succeeded in estimating a set of net industry-specific effects for Scottish industry. It has also sought reasons for the presence of industry-specific effects in industry profit, ranging from business cycle effects and debt servicing to spatial considerations and indigenous conduct. In the forthcoming chapters these factors are discussed in greater depth, highlighting the complex number of variables that make up the distribution in industry profits. This thesis concludes with a modified SCP Paradigm, which recognises not only the role of structure, but industry- and time-specific effects in the determination of industry profits.

[1] As in Chapter *2*, a three- and five-firm concentration ratio respectively, denotes each model.

[2] A GCM with industry-per-time-period specific effects controls for concentration. Therefore, there can be no relationship between industry concentration and the set of specific effects.

Chapter 4 Industry-Per-Time-Period Effects and the Business Cycle

4.1 Introduction : Industry-Per-Time-Period Effects

The main task of chapter *3* was to estimate, identify and suggest possible causes for the industry-specific effects in Scottish industry. In this chapter, one possible source of industry-specific effects is investigated in detail : the *business cycle*. It follows that an industry's position on the business cycle is industry-specific. If this is true, then this phenomenon will be reflected in the cross-industry profit distribution. To analyse the effects of the business cycle industry-specific effects (ISEs) are further decomposed into *industry-per-time-period effects* (IPTPEs). These effects, rather than specific to an industry for a time-series (ISEs), are *specific to an industry for a given time interval*. Therefore, comparisons can be made between industry profits at a given point in time and tested accordingly.

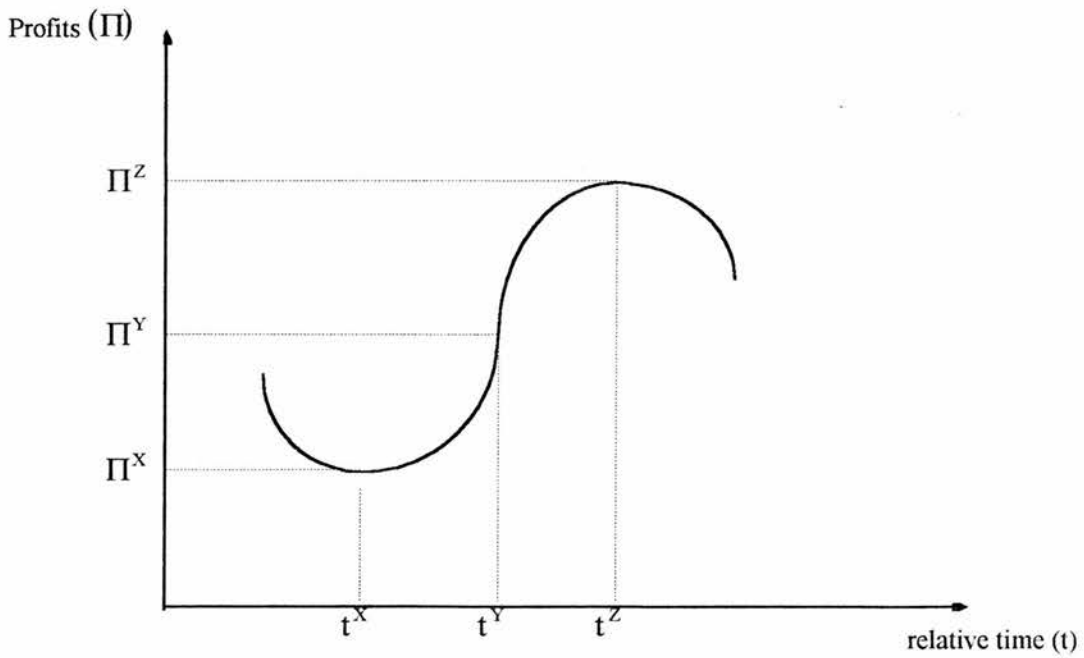
The following section reviews the theory of the industry-business cycle association, before discussing certain 'a priori' expectations specific to the Scottish industry sample. Section *4.3* estimates and tests models incorporating industry-per-time-effects, arguing that non-uniformity in industry-per-time-period effects is only a necessary and not sufficient test for the presence of the business cycle.

4.2 The Business Cycle Across Industries - 'A Priori' Expectations

The theoretical rationale for the role of the business cycle in the determination of industry profit margins is provided by Porter (1983b) and Green and Porter (1984). Both papers analyse supergame models where price wars are triggered by a recession. The mechanism is that a collusive firm cannot distinguish between a reduction in demand and a secret price-cut by another incumbent. The onset of recession trggers a price-war as once-colluding firms initiate punishment strategies. Elaborations on this are observed in Domowitz, Hubbard and Petersen (1986a, 1986b) and Haskel and Martin (1992b).

Therefore, because industries are distributed on the business cycle, it is a likely source of industry-specific effects in profit. Suppose the 'relative-time' positions of three industries *X*, *Y* and *Z* on the business cycle is illustrated in figure *4-1*.

Figure 4-1 : The Relative Positions of Industries X, Y and Z on the Economic Business Cycle.



Industry *Z* experiences boom conditions contemporaneous with continued depression in *X* and recovery in *Y*. The effect of the business cycle in figure *4-1* then is to ensure a profit differential equal to $(\Pi^Z - \Pi^X)$ between two industries at opposite points in the cycle. Providing this differential is maintained throughout the time-series of the original dataset (see chapter *2*), this phenomenon will appear as an industry-specific effect.

To test for any link between industry-per-time-period effects and the business cycle, it is necessary to construct hypothetical distribution(s) of industry profit that could be explained by a business cycle phenomenon. By comparing the estimated industry-per-time-period effects with a hypothetical set generated from a business cycle model(s), the influence of the business cycle can be determined. Several business cycle models are possible depending on whether the business cycle is attributed to either :-

1. a *consumption (demand) shock*,
2. an *investment (supply) shock*.

The demand shock model stresses the role of consumer expectations in determining the future path of economic activity [Vercelli and Dimitri (1992)]. For example, in [Lucas (1973)], each industrial sector is analysed for the effects of both an aggregate and sectoral sales shock. The supply shock model relies on fluctuations in investment expectations [Vercelli and Dimitri (1992)], where capital-intensive industries are particularly sensitive to changes in investment expectations. High levels of capital investment imply an associated risk ensuring that capital-intensive industries are last to emerge from recession.

The time-series dimension of the Scottish panel, *1983-88*, spans economic recovery in the UK, bridging the structural recession of *1979-82* and the Lawson boom [Smith (1992)]. 'A priori' expectations for the Scottish dataset based on a demand and supply shock are given in tables *4-1* and *4-2* respectively :-

Table 4-1 : 'A Priori' Expectations of Industry-Per-Time-Period Effects (IPTPE) using a Demand Shock Hypothesis for the Economic Business Cycle.

INDUSTRY TYPE	'A Priori' IPTPE
Builders' Merchants	Z
Building Contractors	Y
Electronic Component Manufacture	Y
General Haulage	-
Industrial Rubber Manufacture	X
Industrial Valve Manufacture	X
Knitwear Manufacture	Y
Paper Manufacture	Y
Petroleum Product Distribution	Z
Plant Hire	Y
Services to the Oil Industry	X
Slaughterers and Meat Processors	Y
Steel Merchants	Z
Textile Manufacture	Y
Timber Merchants	Z
Vehicle Distribution	Z
Whisky Distilling	Y

notes : See figure *4-1*; '*X*' denotes a component manufacture,
'*Y*' denotes a final product manufacturer,
'*Z*' denotes barometer or service industry,
'-' denotes unknown 'a priori'.
In terms of industry profits ($Z>Y>X$).

Assuming a demand shock, retailers would experience lead times over the secondary industrial sector, while component manufacturers would be the last to emerge from recession.

In terms of industry-per-time-period effects (IPTPEs) in profits, a table *4-1* distribution implies not only some evidence for the presence of a business cycle effect, but the demand shock explanation for the role of the business cycle. 'A priori' expectations based on an investment shock reflect the capital-intensive nature of the manufacturing sector and the particular case of construction, which has been especially slow to emerge from recession because of low investment confidence [Akintole (1995)]. :-

Table 4-2 : 'A Priori' Expectations of Industry-Per-Time-Period Effects (IPTPE) using an Investment Shock Hypothesis for the Economic Business Cycle.

INDUSTRY TYPE	'A Priori' IPTPE
Builders' Merchants	X
Building Contractors	X
Electronic Component Manufacture	Y
General Haulage	-
Industrial Rubber Manufacture	Y
Industrial Valve Manufacture	Y
Knitwear Manufacture	Y
Paper Manufacture	Y
Petroleum Product Distribution	Z
Plant Hire	X
Services to the Oil Industry	Y
Slaughterers and Meat Processors	Y
Steel Merchants	Z
Textile Manufacture	Y
Timber Merchants	Z
Vehicle Distribution	Z
Whisky Distilling	Y

notes : See figure *5-1*; '*X*' denotes a construction-related industry,
'*Y*' denotes a non-construction manufacturer,
'*Z*' denotes a retail or service-sector industry,
'-' denotes unknown 'a priori'.
In terms of industry profits ($Z>Y>X$).

Tables *4-1* and *4-2* then provide two sets of 'a priori' expectations for the business cycle effect hypothesised in figure *4-1*. A number of caveats require discussion at this point. The first of these is the probability that the business cycle itself is industry-specific; that is, each industry effectively follows its own business cycle. In the event of an economy-wide demand, investment or technology shock (real business cycle theories), each industry may react differently and follow its own dynamic course [McCallum (1992)], not to mention the possibility of individual sectoral shocks [Lucas (1973)]. Therefore, any conclusions made are subject to the possibility of an industry-specific business cycle effect.

A second caveat that is addressed in this thesis, is that the distribution of industry-per-time-effects may be entirely or partly as a result of underlying factors. Where a strong 'a priori' relationship exists with industry profits, the possibility remains that other factors - the wage bill, the production mix etc. - ensure that an industry is consistently more profitable than another even allowing for the business cycle effect. For example, if the industry-per-time-period effects in profit for electronic component manufacture exceed that of vehicle distribution, this observation does not match with either set of 'a priori' expectations (tables *4-1* and *4-2*). This is referred to as the *sufficient test* for the business cycle effect. In these circumstances the business cycle effect is dismissed in favour of underlying factors. The task of section *5.6* then is to evaluate evidence of underlying factors for the set of industry-per-time-period effects.

4.3 Models Incorporating Industry-Per-Time-Period Effects (IPTPEs)

A general covariance model (GCM) incorporating $(N \times k)$ industry-per-time-period effects may be written as :-

$$\frac{\Pi_{it}}{S_{it}} = \sum_{j=1}^{N}\sum_{s=1}^{k} \mu_{js}\delta_{it} + \beta' x_{it} + u_{it} \quad , \qquad \text{Eqn. (4.1)}$$

$$(1\times K)(K\times 1)$$

where, $\mu_{js} = 1$ if j is equal to i and s is equal to t,

$\mu_{js} = 0$ if j is not equal to i and/or s is not equal to t.

The main assumption in specification *4.1* is to continue to estimate the industry-per-time-period effects as fixed effects. An alternative specification, the *random effects specification*, would treat the set of industry-per-time-period effects as a normally distributed random variable [Balestra (1994)]. The appropriate caveat to specification *4.1* then is that randomly distributed industry-per-time-period effects estimated as fixed effects must generate inconsistent estimators.

4.3.1 Scottish Industry : A General Covariance Model Incorporating Industry-Per-Time-Period Effects

Tables *4-3* to *4-11* (see below) review estimation results for *two* general covariance model (GCM) specifications. Specification *1* - tables *4-3* to *4-6* - incorporates $(N \times k)$ industry-per-time-period effects and is analogous to the general model in *4-1* :-

$$\frac{\Pi_{mit}}{S_{mit}} = \beta_1 CR3_{mit} + \beta_2 ASR_{mit} + \beta_3 MES_{mit} + \beta_4 MP_{mit}$$
$$+\beta_5 g_{mit} + \beta_6 ARP_{mit} + \sum_{i=1}^{17}\sum_{s=1}^{4} \mu_{js}\delta_{it} + u_{mit} \quad , \text{ Eqn. (4.2)}$$

where, each observation is now denoted in terms of firm *m*,

and, $\mu_{js} = 1$ if j is equal to i and s is equal to t,

$\mu_{js} = 0$ if j is not equal to i and/or s is not equal to t.

The *firm profit-sales ratio* (Π_{mit}/S_{mit}) is explained by the structural regressors :-

$CR3_{mit}$	-	*3*-firm concentration ratio,
ASR_{mit}	-	advertising intensity,
MES_{mit}	-	minimum efficient size (scale economies),
MP_{mit}	-	import penetration,
g_{mit}	-	sales growth rate,
ARP_{mit}	-	average revenue product (for labour),

and the set of industry-per-time-period effects :-

$\sum_{j=1}^{17}\sum_{s=1}^{4}\mu_{js}V_{it}$ - industry-per-time-period fixed effects for *17* industries and *4* years (1984-87).

In the set of tables *4-3* to *4-11* - each table relevant to one particular year - the estimates of *net industry-per-time-period effects*[1] are ranked in ascending order. The set of net industry-per-time-period effects are categorised as follows:-

1. a significant positive parameter - position *Z* on business cycle,
2. an insignificant parameter - position *Y* on the business cycle,
3. a significant negative parameter - position *X* on the business cycle,

in accordance with the hypothetical positions of industries on the business cycle in figure *4-1*. Columns *5* and *6* reproduce the demand and investment shock hypotheses in tables *4-1* and *4-2* respectively. A match across either set of 'a priori' expectations and the net industry-per-time-period estimates implies some evidence for a business cycle effect.

Necessary and *sufficient tests* for this business cycle effect - and whether or not they are satisfied - are analysed in section *4.3.2 - Constraints and Tests : Industry-Per-Time-Period Effects.*

Table 4-3 : Specification *1* Estimates of Net Industry-Per-Time-Period Fixed Effects using Scottish Industry Data (1984) Plus General Statistics

EXPLANATORY VARIABLE	**Estimate**	**T-Statistic**
Constant Term	-0.727	-0.67
3-Firm Conc. Ratio	0.138	5.419
Advertising Intensity	-0.206	-0.286
Scale Economies	-0.147	-0.607
Import Penetration	-3.986	-3.019
Sales Growth Rate	0.023	1.756
ARP (for labour)	0.163E-2	0.502

INDUSTRY TYPE	**Estimate**	**T-Statistic**	**IPTPE**	**'A Priori' Hyp. 1**	**'A Priori' Hyp. 2**
Petroleum Distribution	13.443	2.792	Z	Z	Z
Oil Services	5.702	1.31	Z	X	Y
Steel Merchants	5.312	1.846	Z	Z	Z
Whisky Distillers	4.551	2.137	Z	Y	Y
Knitwear Manufacturers	0.828	0.572	Y	Y	Y
Paper Manufacturers	0.808	0.464	Y	Y	Y
Building Contractors	0.393	0.425	Y	Y	X
Plant Hire	0.326	0.231	Y	Y	X
Timber Merchants	0.044	0.041	Y	Z	Z
General Haulage	-0.463	-0.594	Y	-	-
Builders' Merchants	-0.478	-0.622	Y	Z	X
Industrial Valve Prodn.	-2.106	-0.557	Y	X	Y
Vehicle Distribution	-3.117	-3.731	X	Z	Z
Slaughterers	-4.313	-7.023	X	Y	Y
Textile Manufacture	-5.365	-3.059	X	Y	Y
Electronic Components	-6.348	--3.604	X	Y	Y
Rubber Manufacture	-6.415	-2.298	X	X	Y

GENERAL STATISTICS	
No. of Observations	2266
Degrees of Freedom (*df*)	2191
R^2 (adjusted)	0.144
F-test	0.5E+01
Autocorrelation	0.004

Durbin-Watson	1.992

Table 4-4 : Specification *1* Estimates of Net Industry-Per-Time-Period Fixed Effects using Scottish Industry Data (1985)

INDUSTRY TYPE	Estimate	T-Statistic	IPTPE	'A Priori' Hyp. 1	'A Priori' Hyp. 2
Petroleum Distribution	6.504	2.503	Z	Z	Z
Whisky Distillers	4.124	1.57	Z	Y	Y
Steel Merchants	2.607	1.076	Y	Z	Z
Knitwear Manufacturers	1.045	0.819	Y	Y	Y
Plant Hire	0.818	0.62	Y	Y	X
Paper Manufacturers	0.389	0.291	Y	Y	Y
General Haulage	-0.118	-0.143	Y	-	-
Oil Services	-0.492	-0.123	Y	X	Y
Builders' Contractors	-0.64	-0.7	Y	Y	X
Building Merchants	-0.758	-0.953	Y	Z	X
Industrial Valve Prodn.	-1.435	-0.472	Y	X	Y
Timber Merchants	-1.545	-1.504	X	Z	Z
Vehicle Distribution	-3.128	-4.828	X	Z	Z
Slaughterers	-3.9	-5.058	X	Y	Y
Textile Manufacture	-4.549	-2.796	X	Y	Y
Rubber Manufacture	-5.196	-1.468	X	X	Y
Electronic Components	-7.026	-3.693	X	Y	Y

Table 4-5 : Specification *1* Estimates of Net Industry-Per-Time-Period Fixed Effects using Scottish Industry Data (1986)

INDUSTRY TYPE	Estimate	T-Statistic	IPTPE	'A Priori' Hyp. 1	'A Priori' Hyp. 2
Whisky Distillers	3.137	1.608	Z	Y	Y
Paper Manufacturers	2.284	1.437	Z	Y	Y
Petroleum Distribution	1.242	0.649	Y	Z	Z
Steel Merchants	1.188	0.662	Y	Z	Z
General Haulage	0.661	0.677	Y	-	-
Industrial Valve Prodn.	0.484	0.135	Y	X	Y
Plant Hire	-0.175	-0.118	Y	Y	X
Knitwear Manufacturers	-0.8	-0.49	Y	Y	Y
Builders' Merchants	-0.904	-1.207	Y	Z	X
Vehicle Distribution	-2.246	-2.344	X	Z	Z
Timber Merchants	-2.363	-2.368	X	Z	Z
Building Contractors	-2.731	-1.933	X	Y	X
Slaughterers	-3.212	-4.63	X	Y	Y
Textile Manufacturers	-4.571	-2.304	X	Y	Y

Rubber Manufacture	-6.434	-2.837	X	X	Y
Electronic Components	-8.488	-4.264	X	Y	Y
Oil Services	-8.621	-0.997	Y	X	Y

Table 4-6 : Specification *1* Estimates of Net Industry-Per-Time-Period Fixed Effects using Scottish Industry Data (1987)

INDUSTRY TYPE	**Estimate**	**T-Statistic**	**IPTPE**	**'A Priori' Hyp. 1**	**'A Priori' Hyp. 2**
Paper Manufacturers	3.923	1.638	Z	Y	Y
Whisky Distillers	3.399	1.762	Z	Y	Y
Oil Services	2.978	0.343	Y	X	Y
Industrial Valve Prodn.	1.03	0.322	Y	X	Y
Knitwear Manufacturers	-0.053	-0.04	Y	Y	Y
Petroleum Distribution	-0.519	-0.203	Y	Z	Z
Timber Merchants	-0.606	-0.714	Y	Z	Z
Steel Merchants	-0.812	-0.516	Y	Z	Z
General Haulage	-0.85	-0.825	Y	-	-
Plant Hire	-1.033	-0.513	Y	Y	X
Building Contractors	-1.626	-1.561	X	Y	X
Vehicle Distribution	-2.064	-3.812	X	Z	Z
Slaughterers	-3.249	-4.4	X	Y	Y
Builders' Merchants	-3.384	-2.372	X	Z	X
Rubber Manufacture	-3.921	-1.873	X	X	Y
Textile Manufacture	-4.359	-2.604	X	Y	Y
Electronic Components	-8.333	-3.179	X	Y	Y

notes: All t-tests have been corrected for the presence off heteroscedasticity using White's (1978) consistent estimate methodology.
The Breusch-Pagan (1979) test was used to test for the presence of heteroscedasticity.

In specification *2* :-

$$\frac{\Pi_{mit}}{S_{mit}} = \beta_1 CR3_{mit} + \beta_2 ASR_{mit} + \beta_3 MES_{mit} + \beta_4 MP_{mit} + \beta_5 g_{mit} + \beta_6 ARP_{mit} + \sum_{j=1}^{17} \mu_{js}\delta_{it} + u_{mit} \quad \text{, Eqn. (4.3)}$$

where, $\mu_{js} = 1$ if j is equal to i and s is equal to t,

$\mu_{js} = 0$ if j is not equal to i and/or s is not equal to t,

$(s = 1,2,3,4,5)$ [2] defines a sequence of *5* regressions, each with *N* industry-per-time-period effects :-

$\sum_{j=1}^{17} \mu_{js} v_{it}$ - industry-per-time-period fixed effects for *17* industries per-year.

The regression results for specification *2* are listed in tables *4-7* to *4-11* respectively, in a format identical to those for specification *1*.

Table 4-7 : Specification *2* Estimates of Net Industry-Per-Time-Period Fixed Effects using Scottish Industry Data (1984)

EXPLANATORY VARIABLE	Estimate	T-Statistic
Constant Term	-0.434	-0.762
3-Firm Conc. Ratio	0.977E-1	8.61
Advertising Intensity	-0.41	-1.757
Scale Economies	0.241E-1	0.211
Import Penetration	-2.938	-5.305
Sales Growth Rate	0.236E-1	5.615
ARP (for labour)	0.59E-2	3.332

INDUSTRY TYPE	Estimate	T-Statistic	IPTPE	'A Priori' Hyp. 1	'A Priori' Hyp. 2
Petroleum Distribution	8.944	4.392	Z	Z	Z
Whisky Distillers	5.635	2.742	Z	Y	Y
Oil Services	4.417	1.196	Z	X	Y
Steel Merchants	3.671	2.998	Z	Z	Z
Knitwear Manufacturers	1.83	1.31	Y	Y	Y
Paper Manufacturers	1.63	1.063	Y	Y	Y
Plant Hire	1.234	1.047	Y	Y	X
Building Contractors	1.049	1.242	Y	Y	X
Timber Merchants	0.199	0.237	Y	Z	Z
Builders' Merchants	0.14	0.214	Y	Z	X
General Haulage	0.648E-2	0.11	Y	-	-
Industrial Valve Prodn.	-1.311	-3.358	Y	X	Y
Vehicle Distribution	-2.332	-5.064	X	Z	Z
Textile Manufacture	-2.877	-1.957	X	Y	Y
Slaughterers	-3.449	-6.635	X	Y	Y
Electronic Components	-3.796	-2.6	X	Y	Y
Rubber Manufacture	-4.855	-1.821	X	X	Y

GENERAL STATISTICS	
No. of Observations	2266
Degrees of Freedom (*df*)	2242
R^2 (adjusted)	0.709
F-test	0.851
Autocorrelation	0.07
Durbin-Watson	1.86

notes: All t-tests have been corrected for the presence off heteroscedasticity using White's (1978) consistent estimate methodology.
The Breusch-Pagan (1979) test was used to test for the presence of heteroscedasticity.

Table 4-8 : Specification *2* Estimates of Net Industry-Per-Time-Period Fixed Effects using Scottish Industry Data (1985)

EXPLANATORY VARIABLE	Estimate	T-Statistic
Constant Term	-0.104	-0.183
3-Firm Conc. Ratio	0.842E-1	7.531
Advertising Intensity	-0.533	-2.315
Scale Economies	0.706E-1	0.582
Import Penetration	-1.729	-4.404
Sales Growth Rate	0.233E-1	5.527
ARP (for labour)	0.603E-2	3.386

INDUSTRY TYPE	Estimate	T-Statistic	IPTPE	'A Priori' Hyp. 1	'A Priori' Hyp. 2
Whisky Distilling	5.62	2.202	Z	Y	Y
Knitwear Manufacturing	2.007	1.638	Z	Y	Y
Paper Manufacturing	1.693	1.4	Z	Y	Y
Plant Hire	1.364	1.057	Y	Y	X
General Haulage	0.509	0.759	Y	-	-
Petroleum Distribution	0.412	0.338	Y	Z	Z
Building Contractors	0.133	0.158	Y	Y	X
Steel Merchants	-0.215	-0.222	Y	Z	Z
Industrial Valve Prodn.	-0.249	-0.084	Y	X	Y
Builders' Merchants	-0.431	-0.65	Y	Z	X
Textile Manufacture	-1.329	-1.039	Y	Y	Y
Timber Merchants	-1.355	-1.513	X	Z	Z
Oil Services	-1.481	-0.391	Y	X	Y
Vehicle Distribution	-2.16	-6.615	X	Z	Z
Slaughterers	-3.164	-4.429	X	Y	Y
Electronic Components	-3.845	-2.407	X	Y	Y
Rubber Manufacture	-5.32	-1.831	X	X	Y

GENERAL STATISTICS	
No. of Observations	2266
Degrees of Freedom (*df*)	2241
R^2 (adjusted)	0.641
F-test	0.775+01
Autocorrelation	0.076
Durbin-Watson	1.848

notes: All t-tests have been corrected for the presence off heteroscedasticity using White's (1978) consistent estimate methodology.
The Breusch-Pagan (1979) test was used to test for the presence of heteroscedasticity.

Table 4-9 : Specification *2* Estimates of Net Industry-Per-Time-Period Fixed Effects using Scottish Industry Data (1986)

EXPLANATORY VARIABLE	Estimate	T-Statistic
Constant Term	-0.139	-0.245
3-Firm Conc. Ratio	0.834E-1	7.911
Advertising Intensity	-0.44	-1.827
Scale Economies	0.509E-2	-0.043
Import Penetration	-1.554	-4.089
Sales Growth Rate	0.22E-1	5.195
ARP (for labour)	0.565E-2	3.165

INDUSTRY TYPE	Estimate	T-Statistic	IPTPE	'A Priori' Hyp. 1	'A Priori' Hyp. 2
Whisky Distilling	4.43	2.397	Z	Y	Y
Paper Manufacture	2.634	1.924	Z	Y	Y
Industrial Valve Prodn.	1.306	0.394	Y	X	Y
General Haulage	1.155	0.811	Y	-	-
Knitwear Manufacturing	0.406	0.258	Y	Y	Y
Plant Hire	0.052	0.041	Y	Y	X
Builders' Merchants	-0.835	-1.348	X	Z	X
Steel Merchants	-0.939	-1.136	Y	Z	Z
Petroleum Distribution	-1.236	-0.997	Y	Z	Z
Textile Manufacture	-1.51	-0.893	Y	Y	Y
Vehicle Distribution	-1.682	-2.988	X	Z	Z
Building Contractors	-1.932	-1.402	X	Y	X
Timber Merchants	-2.105	-2.389	X	Z	Z
Slaughterers	-2.651	-4.29	X	Y	Y
Rubber Manufacture	-4.794	-2.376	X	X	Y
Electronic Components	-5.323	-3.266	X	Y	Y
Oil Services	-8.58	-0.995	Y	X	Y

GENERAL STATISTICS	
No. of Observations	2266
Degrees of Freedom (*df*)	2242
R^2 (adjusted)	0.665
F-test	0.802
Autocorrelation	0.074
Durbin-Watson	1.852

notes: All t-tests have been corrected for the presence off heteroscedasticity using White's (1978) consistent estimate methodology.
The Breusch-Pagan (1979) test was used to test for the presence of heteroscedasticity.

Table 4-10 : Specification *2* Estimates of Net Industry-Per-Time-Period Fixed Effects using Scottish Industry Data (1987)

EXPLANATORY VARIABLE	Estimate	T-Statistic
Constant Term	0.224	0.389
3-Firm Conc. Ratio	0.817E-1	7.256
Advertising Intensity	-0.807	-2.902
Scale Economies	-0.902E-1	-0.789
Import Penetration	-1.326	-3.501
Sales Growth Rate	0.237E-1	5.636
ARP (for labour)	0.684E-2	3.838

INDUSTRY TYPE	Estimate	T-Statistic	IPTPE	'A Priori' Hyp. 1	'A Priori' Hyp. 2
Oil Services	6.861	0.825	Y	X	Y
Whisky Distilling	4.953	2.731	Z	Y	Y
Paper Manufacturing	4.371	2.389	Z	Y	Y
Industrial Valve Prodn.	2.466	0.79	Y	X	Y
Knitwear Manufacturing	1.381	1.102	Y	Y	Y
Petroleum Distribution	0.94	0.501	Y	Z	Z
General Haulage	-0.141	-0.152	Y	-	-
Timber Merchants	-0.646	-0.958	Y	Z	Z
Plant Hire	-0.831	-0.45	Y	Y	X
Textile Manufacture	-1.107	-0.84	Y	Y	Y
Building Contractors	-1.169	-1.185	Y	Y	X
Rubber Manufacture	-1.247	-0.646	Y	X	Y
Vehicle Distribution	-1.787	-4.362	X	Z	Z
Steel Merchants	-1.921	-1.870	X	Z	Z
Slaughterers	-2.475	-3.538	X	Y	Y
Builders' Merchants	-2.773	-2.096	X	Z	X
Electronic Components	-5.211	-2.177	X	Y	Y

GENERAL STATISTICS	
No. of Observations	2266
Degrees of Freedom (*df*)	2242
R^2 (adjusted)	0.655
F-test	0.79
Autocorrelation	0.072
Durbin-Watson	1.857

notes: All t-tests have been corrected for the presence off heteroscedasticity using White's (1978) consistent estimate methodology.
The Breusch-Pagan (1979) test was used to test for the presence of heteroscedasticity.

Table 4-11 : Specification *2* Estimates of Net Industry-Per-Time-Period Fixed Effects using Scottish Industry Data (1988)

EXPLANATORY VARIABLE	Estimate	T-Statistic
Constant Term	0.475	0.817
3-Firm Conc. Ratio	0.688E-1	6.032
Advertising Intensity	-0.668	-2.479
Scale Economies	0.217E-1	0.183
Import Penetration	-1.389	-3.578
Sales Growth Rate	0.234E-1	5.589
ARP (for labour)	0.573E-2	3.197

INDUSTRY TYPE	Estimate	T-Statistic	IPTPE	'A Priori' Hyp. 1	'A Priori' Hyp. 2
Oil Services	9.872	1.229	Y	X	Y
Whisky Distilling	8.579	4.99	Z	Y	Y
Plant Hire	4.273	2.611	Z	Y	X
Paper Manufacturing	4.026	2.21	Z	Y	Y
Knitwear Manufacturing	1.886	1.348	Z	Y	Y
Timber Merchants	1.31	1.086	Y	Z	Z
Textile Manufacture	-0.143	-0.11	Y	Y	Y
Steel Merchants	-0.337	-0.222	Y	Z	Z
Rubber Manufacture	-0.339	-0.194	Y	X	Y
General Haulage	-0.428	-0.534	Y	-	-
Building Contractors	-0.496	-0.532	Y	Y	X
Vehicle Distribution	-0.887	-2.63	X	Z	Z
Industrial Valve Prodn.	0.767	0.244	Y	X	Y
Electronic Components	-0.986	-0.613	Y	Y	Y
Slaughterers	-1.481	-1.499	X	Y	Y
Petroleum Distribution	-1.497	-0.862	Y	Z	Z
Builders' Merchants	-2.499	-2.742	X	Z	X

GENERAL STATISTICS	
No. of Observations	2266
Degrees of Freedom (*df*)	2242
R^2	0.814
F-test	0.973
Autocorrelation	0.062
Durbin-Watson	1.876

notes: All t-tests have been corrected for the presence off heteroscedasticity using White's (1978) consistent estimate methodology.
The Breusch-Pagan (1979) test was used to test for the presence of heteroscedasticity.

Prior to discussing the set of industry-per-time-period effects, it is interesting to review the parameter signs on the inter-industry structural regressors. :-

$CR3_{mit}$	-	3-firm concentration ratio,
ASR_{mit}	-	advertising intensity,
MES_{mit}	-	minimum efficient size (scale economies),
MP_{mit}	-	import penetration,
g_{mit}	-	sales growth rate,
ARP_{mit}	-	average revenue product (for labour).

Equations *4.2* and *4.3* represent another alternative set of specifications in which to confirm or reject the 'a priori' expectations discussed in chapter *3*.

'A Priori' expectations are confirmed for the three-firm concentration ratio and its relationship to the *firm profit-sales ratio*. Both specifications *1* and *2*, and all *6* regressions confirm a significant positive parameter for CR3. Other variables which exhibit the appropriate signs across both specifications include the industry import penetration and the firm sales growth rate. Moreover, specification *2* endorses the competitive hypothesis for advertising expenditure, and a positive link between firm labour productivity and profitability [Fare *et al.* (1994)]. The parameter results for scale economies remain inconclusive confirming the measurement difficulties with this variable [Saving (1961), Rees (1973)].

4.3.2 Constraints and Tests : Industry-Per-Time-Period Effects

For a business cycle effect to be present it must hold that :-

$$\mu_{1k} \neq \mu_{2k} \neq \ldots \neq \mu_{Nk} \ , \qquad \text{Eqn. (4.4)}$$

for N industries in a given time interval k. The requirement then is to construct a sequence of test constraints for each year belonging to this particular panel dataset :-

$$H_0 : \mu_{1,84} = \mu_{2,84} = \ldots = \mu_{N,84} \ , \qquad \text{Eqn. (4.5)}$$
$$H_0' : \mu_{1,85} = \mu_{2,85} = \ldots = \mu_{N,85} \ , \qquad \text{Eqn. (4.6)}$$
$$H_0'' : \mu_{1,86} = \mu_{2,86} = \ldots = \mu_{N,86} \ , \qquad \text{Eqn. (4.7)}$$
$$H_0''' : \mu_{1,87} = \mu_{2,87} = \ldots = \mu_{N,87} \ , \qquad \text{Eqn. (4.8)}$$
$$H_0'''' : \mu_{1,88} = \mu_{2,88} = \ldots = \mu_{N,88} \ . \qquad \text{Eqn. (4.9)}$$

The rejection of any number or all the null hypotheses $\left(H_0, H_0', H_0'', H_0''', H_0''''\right)$ implies that the *necessary condition* for the role of the business cycle in generating a cross-industry profit distribution is satisfied. Tables *4-3* to *4-11* provide sufficient proof of this with column *4* categorising industries according to the parameter sign and significance of the net industry-per-time-period effect. For example, of the seventeen Scottish industries, in *1984* with specification *1* :-

- *4* industries are category *Z* industries (a *significant positive* net industry-per-time-period effect),
- *8* industries are category *Y* industries (an *insignificant* net industry-per-time-period effect),
- *5* industries are category *X* industries (a *significant negative* net industry-per-time-period effect).

What is to say that the cross-industry distribution of net industry-per-time-period effects in profits is indeed a business cycle effect, and not the result of other *underlying economic factors*. How might this hypothesis be tested? One method is observed in columns *5* and *6* of tables *4-3* to *4-11*.

These reproduce 'a priori' expectations of the Scottish cross-industry business cycle relationship in tables *4-1* and *4-2*, based on the *demand* and *investment shock models* respectively (see above). Matching these 'a priori' expectations to the category set in column *4*, formed from estimates of net industry-per-time-period parameters, may provide some evidence for the business cycle effect in a cross-industry profits distribution. The ability to match 'a priori' expectation with actual result consistently for each period is denoted as the *sufficient condition* for the presence of the business cycle.

Table *4-12* reviews the evidence for in this particular cross-section of Scottish industry, that the sufficient condition holds. It provides a summary of the association between the set of net industry-per-time-period estimates and a business cycle effect, as defined by the demand and investment shock models.

Table 4-12 : Review of the Consistency of the Demand and Investment Shock Models with the Scottish Net Industry-Per-Time-Period Parameter Estimates (1984-88).

INDUSTRY TYPE	SPEC. 1 HYP. 1 (a/b)	SPEC. 1 HYP. 2 (a/b)	SPEC. 2 HYP. 1 (a/b)	SPEC. 2 HYP. 2 (a/b)
Builders' Merchants	0/4	1/4	0/5	3/5
Building Contractors	2/4	2/4	4/5	1/5
Electronic Components	0/4	0/4	1/5	1/5
General Haulage	-	-	-	-
Rubber Manufacture	4/4	0/4	3/5	2/5
Industrial Valve Prodn.	0/4	4/4	0/5	5/5
Knitwear Manufacture	4/4	4/4	3/5	3/5
Paper Manufacture	2/4	2/4	1/5	1/5
Petroleum Distribution	2/4	2/4	1/5	1/5
Plant Hire	4/4	0/4	4/5	0/5
Oil Services	0/4	3/4	0/5	4/5
Slaughterers	0/4	0/4	0/5	0/5
Steel Merchants	1/4	1/4	1/5	1/5
Textile Manufacture	0/4	0/4	4/5	4/5
Timber Merchants	0/4	0/4	0/5	0/5
Vehicle Distribution	0/4	0/4	0/5	0/5
Whisky Distilling	0/4	0/4	0/5	0/5

ANNUAL PERIOD	SPEC. 1 HYP. 1 (a/b)	SPEC. 1 HYP. 2 (a/b)	SPEC. 2 HYP. 1 (a/b)	SPEC. 2 HYP. 2 (a/b)
1984	7/16	5/16	7/16	5/16
1985	6/16	5/16	4/16	3/16
1986	3/16	4/16	4/16	6/16
1987	3/16	5/16	4/16	6/16
1988	-	-	3/16	6/16
Total	19/64	19/64	22/80	26/80

notes : (*a/b*) indicates the proportion of net industry-per-time-period parameter estimates that match either of the 'a priori' expectations for an industry, period and in total.

The main finding from tables *4-3* to *4-11* and the summary table *4-12* is a *non-association* between the estimates of net industry-per-time-period effects and the 'a priori' expectations. For example, only in four industries - plant hire, industrial valve, rubber and knitwear manufacture - with either specification is there a perfect 'match' between the estimates and 'a priori' expectations. With the remaining industries, the 'match' is either incomplete, or non-existent altogether. It follows that the net industry-per-time-period estimates do not provide any immediate evidence for a business cycle effect. The sufficient condition is therefore not satisfied.

A general non-association points to other underlying factors as being responsible for the set of net industry-per-time-period effects. This is certainly the correct conclusion. For example, vehicle distribution, a retail category *Z* industry, consistently falls into category *X*. Similarly, whisky distilling lies ahead on the business cycle in category *Z* if the set of industry-per-time-period effects are to be interpreted in such a fashion. Excepting the possibility of an *industry-specific business cycle*, it is much more likely that a manufacturing industry such as whisky distilling will lag the retail industry as whole in any economic recovery.

A final point is that a number of industry-per-time-period estimates shift between industry categories *X*, *Y* or *Z*. This then reinforces the idiosyncratic nature [Katics and Peterson (1993)] not only of industry-specific, but also industry-per-time-period parameters. It follows that these fixed effects parameter estimates reflect a number of underlying elements, the combined effect of which is enough to 'block out' the detection of any business cycle effect as defined in figure *4-1* for this sample of Scottish industry.

[1] Analogous to net industry-specific effects (see Chapter *3*)

[2] $s = 1,2,3,4,5$ denotes the year *1984,85,86,87* and *1988* respectively.

Chapter 5 Intra-Industry Differences and Accounting Data

5.1 Introduction : Intra-Industry Differences

In this chapter the emphasis is on underlying factors that are possibly responsible for the set of industry-specific effects identified in chapter *3*. Unlike chapter *4* where the likelihood of a business cycle effect was reviewed, this chapter concentrates on *hard accounting data*. Disaggregated firm data on the following variables is subject to review :-

- Labour and Capital Costs,
- Capital-Labour Ratio (the production mix),
- Current Ratio (assets versus liabilities),
- Spatial or Firm Location Factors,
- Borrowing Ratio,
- Income Gearing,
- Export Ratio.

Any or all of the above variables may be responsible for *intra-industry differences* in profit, where intra-industry differences is an alternative reference to *industry-specific effects*. Econometrically, in regression *5.1* - the general covariance model (GCM), :-

$$\frac{\Pi_{it}}{S_{it}} = \beta_0 + \beta_1 CR3_{it} + \beta_2 ASR_{it} + \beta_3 MES_{it} + \beta_4 MP_{it} + \beta_5 g_{it} + \beta_6 ARP_{it} + \sum^{16} \delta_j a_i + \sum^{4} \gamma_s q_t + u_{it} \quad , \qquad \text{Eqn. (5.1)}$$

controls for *inter-industry differences* in profit through the structural regressors. Remaining is the set of industry-specific effects or intra-industry differences in profit.

The methodology of analysis in the following sections is to correlate possible underlying variables with the set of *net* industry-specific effects. Regression analysis is disallowed because parameter stability cannot be relied upon in cross-industry regressions [Davies (1994)]. Variables that may account for the set of industry-specific effects in *5.1* must be analysed by a method that excludes any cross-industry assumptions. Correlation represents the simplest method of doing this.

5.2 Intra-Industry Differences : Cost Conditions in Scottish Industry

5.2.1 'A Priori' Expectations

One explanation for the distribution in industry-specific effects (intra-industry differences) is the existence of different cost conditions between industries. The justification for a revisitation of industry costs concerns the general weakness of survivor techniques (see chapter *3*) which has led many commentators to conclude that it represents a poor approximation of actual industry cost conditions [Lyons (1980)]. Suppose that survivor analysis fails to account for the 'true' cost conditions across an industry set. It follows that the effect of cost conditions on cross-industry profits will be reflected in the industry-specific parameter estimates.

The 'a priori' expectation of the cost-profit relationship is straightforward : higher total costs in an industry imply lower profits. In section *5.2.2* then, *labour* and *capital costs* are analysed as possible determinants of the set of industry-specific parameters. As for the exact nature of the variables, the *mean firm input-output ratios* for labour and capital in an industry, (IO_L) and (IO_K), are used to approximate the labour and capital cost conditions respectively :-

$$IO_L = \frac{\sum_{i=1}^{n} w_i \times l_i / s_i}{n}, \qquad \text{Eqn. (5.2)}$$

$$IO_K = \frac{\sum_{i=1}^{n} k_i / s_i}{n}, \qquad \text{Eqn. (5.3)}$$

where, $(w_i \times l_i)$ denotes incumbent firm *i*'s wage bill. Similarly, capital costs is denoted by (k_i) and turnover by (s_i). Capital costs imply a difficult measurement problem with the accounting measure *capital expenditure* the only proxy available[1].

5.2.2 Industry Costs : Industry-Specific Effects

Table *5-1* lists the mean firm input-output ratios of labour and capital for each industry alongside the *net industry-specific effects*[2] estimated using the general covariance specification in *3.4*[3]. :-

Table 5-1 : Mean Firm Input-Output Ratios of Labour and Capital Versus the set of Net Industry-Specific Effects (Regressions *1* and *2*)

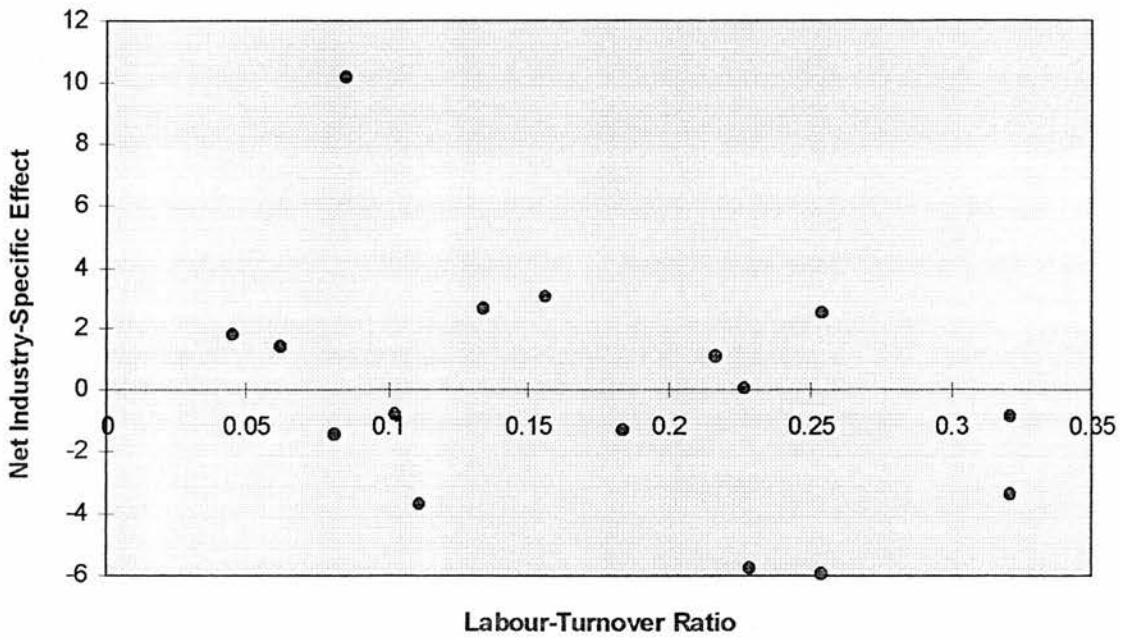
Industry Type	(IO_L)	(IO_K)	Net ISE (R1)	Net ISE (R2)
Building Contractors	0.22	0.28	1.12	1.69
Builders' Merchants	0.1	0.23	-0.76	-1.13
Electronic Components	0.23	0.34	-5.74	-4.41
Industrial Rubber	0.25	0.34	-5.91	-5.7
Industrial Valves	0.23	0.56	0.08	-0.82
Knitwear Manufacture	0.25	0.36	2.54	2.63
Oil Services	0.32	2.48	-3.36	-5.43
Paper Manufacture	0.16	0.44	3.05	1.99
Petroleum Distribution	0.04	0.06	1.85	2.39
Plant Hire	0.32	0.51	-0.79	-0.11
Slaughterers	0.11	0.18	-3.68	-3.61
Steel Merchants	0.08	0.3	-1.41	-2.18
Textile Manufacture	0.18	0.4	-1.26	-1.23
Timber Merchants	0.13	0.31	2.65	2.75
Vehicle Distribution	0.06	0.13	1.45	2.32
Whisky Distilling	0.08	0.91	10.18	10.85

	(IO_L)	(IO_K)
Net ISE (R1)	-0.418*	-0.041
Net ISE (R2)	-0.444*	-0.170

notes: * indicates that the correlation coefficient is statistical significance at the *5* per cent level.

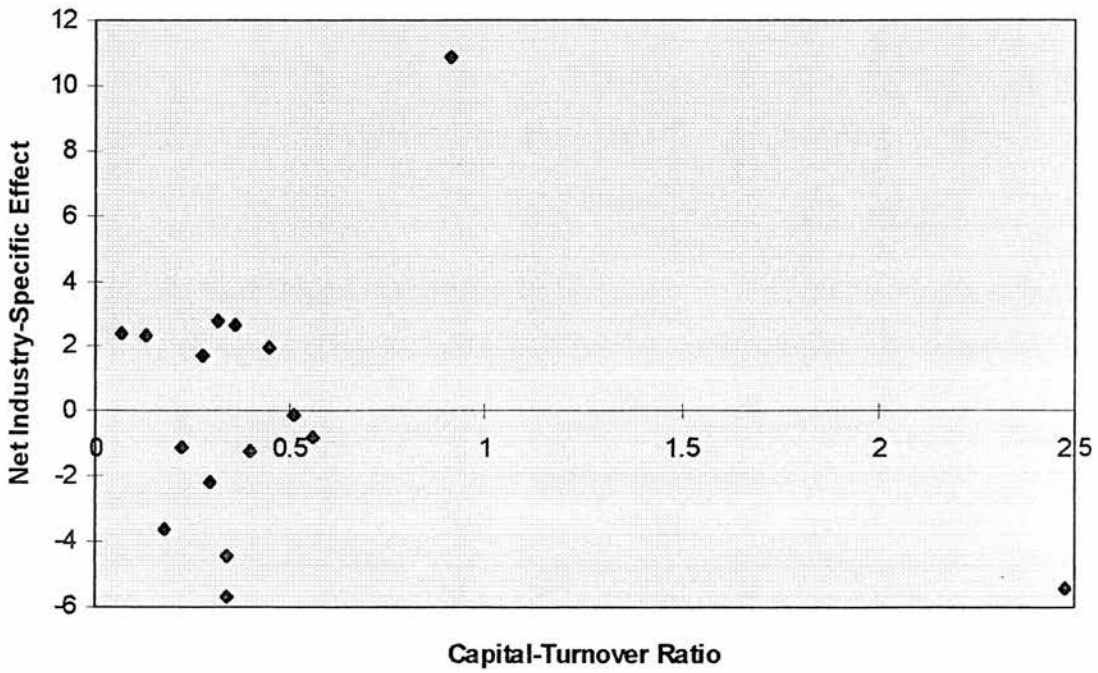
The conclusion from table *5-2* is that the 'a priori' expectations with respect to the input-output ratio for labour are confirmed. There is a statistically significant negative correlation between labour costs as a proportion of firm turnover and the set of net industry-specific effects. :-

Figure 5-1 : The Labour-Turnover Ratio (IO_L) Versus the set of Net Industry-Specific Effects (Regression *1*)



As for the capital-turnover ratio, a negative correlation is present but is statistically insignifcant (figure *5-2*). One explanation of this phenomenon is the difficulty of measuring the true cost of capital employment. It is certainly possible that a significant negative correlation between (IO_K) and the set of net industry-specific effects is eliminated by errors in measurement and definition.

Figure 5-2 : The Capital-Turnover Ratio (IO_K) Versus the set of Net Industry-Specific Effects (Regression *2*)



5.3 Intra-Industry Differences : The Production Mix in Scottish Industry

5.3.1 'A Priori' Expectations

The *capital-labour ratio* provides useful summary information of the relative importance of capital and labour factor inputs, the *production mix* in an industry. As for 'a priori' expectations, the relationship between the production mix and the level of industry profits is complex and certainly specific to each industry. As a general proposition, within manufacturing, capital-intensive production is likely to command higher profit margins than labour-intensive processes [Best (1990)], while retail sector margins have historically in the UK been lower than manufacturers' margins [Jones and Cockerill (1984)].

5.3.2 Capital-Labour Ratios : Industry-Specific Effects

Unfortunately, accounting data on firms provides no direct measure of the capital-labour ratio, certainly nothing that compares to the standard economic definition [Pendlebury and Groves (1994)]. *Fixed assets per employee* (FA/L) remains the most useful guide to the capital- or labour-intensity of industry using accountancy data.

Table 5-3 : Mean Firm Fixed Assets Per Employee (FA/L) Versus the set of Net Industry-Specific Effects (Regressions *1* and *2*)

Industry Type	FA/L	Net ISE (R1)	Net ISE (R2)
Building Contractors	7.032	1.117	1.687
Builders' Merchants	12.990	-0.758	-1.125
Electronic Components	10.950	-5.740	-4.413
Industrial Rubber	5.439	-5.914	-5.698
Industrial Valves	11.324	0.086	-0.822
Knitwear Manufacture	6.436	2.539	2.634
Oil Services	95.900	-3.359	-5.434
Paper Manufacture	35.264	3.049	1.994
Petroleum Distribution	16.959	1.845	2.392

Plant Hire	20.959	-0.792	-0.112
Slaughterers	9.369	-3.676	-3.605
Steel Merchants	20.036	-1.409	-2.184
Textile Manufacture	6.446	-1.261	-1.226
Timber Merchants	7.828	2.652	2.751
Vehicle Distribution	8.583	1.450	2.319
Whisky Distilling	41.129	10.176	10.848

Table 5-4 : The Correlation Matrix between Fixed Assets Per Employee and the set of Net Industry-Specific Effects (Regressions *1* and *2*).

	FA/L
Net ISE (R1)	0.075
Net ISE (R2)	-0.061

A correlation between the mean firm fixed assets per employee for an industry and the net industry-specific effects might reveal cross-industry variations in the production system as an important underlying factor in intra-industry profit differences between industries. The correlation matrix (table 5-4) indicates that there is no match between the capital-labour mix in an industry - proxied by fixed assets per employee - and the set of net industry-specific effects.

5.4 Intra-Industry Differences : Assets and Liabilities in Scottish Industry

5.4.1 'A Priori' Expectations

Another possible underlying factor in the set of industry-specific effects in profit is *the debt burden* facing firms within an industry. Obviously, debt interest requires priority payment before any profit allocation to shareholders. It follows that industries facing relatively high liabilities experience lower than average profits ceteris paribus. To measure the relative financial strength or weakness of each industry in the short-term, the *current ratio* (CR) is used :-

$$CR = \frac{\text{current assets}}{\text{current liabilities}} . \qquad \text{Eqn. (5.4)}$$

5.4.2 Assets and Liabilities as Industry-Specific Effects

Table 5-5 : Mean Firm Current Ratio (CR) Versus the set of Net Industry-Specific Effects (Regressions *1* and *2*)

Industry Type	CR	Net ISE (R1)	Net ISE (R2)
Building Contractors	1.650	1.117	1.687
Builders' Merchants	1.355	-0.758	-1.125
Electronic Components	1.387	-5.740	-4.413
Industrial Rubber	1.768	-5.914	-5.698
Industrial Valves	2.274	0.086	-0.822
Knitwear Manufacture	1.720	2.539	2.634
Oil Services	6.838	-3.359	-5.434
Paper Manufacture	1.594	3.049	1.994
Petroleum Distribution	1.101	1.845	2.392
Plant Hire	0.950	-0.792	-0.112
Slaughterers	1.452	-3.676	-3.605
Steel Merchants	1.415	-1.409	-2.184
Textile Manufacture	2.853	-1.261	-1.226
Timber Merchants	1.756	2.652	2.751

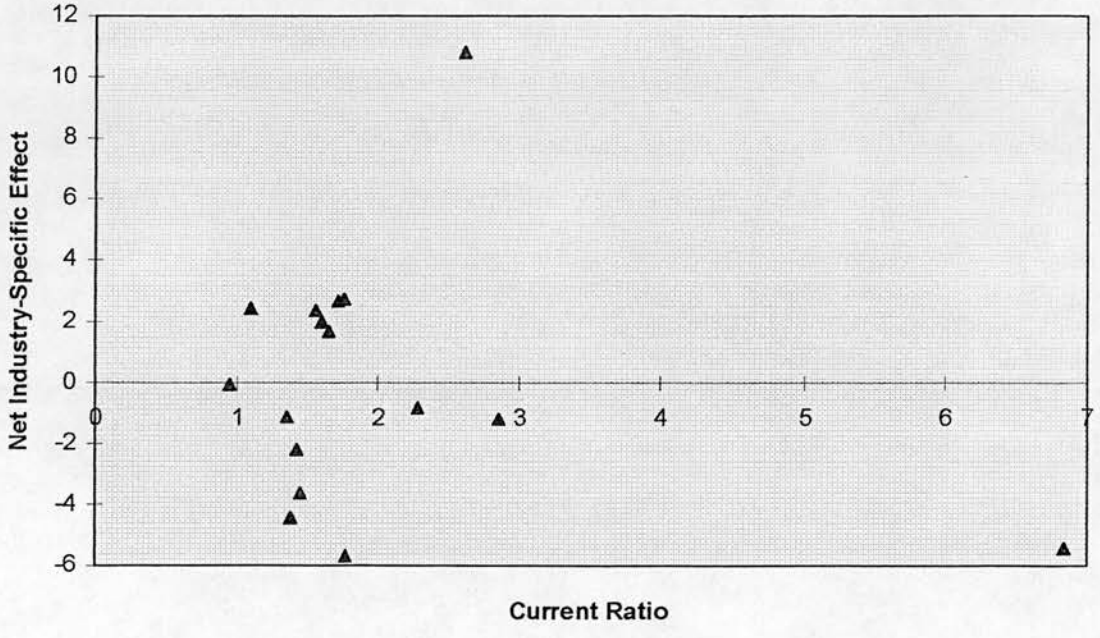
Vehicle Distribution	1.560	1.450	2.319
Whisky Distilling	2.611	10.176	10.848

Table 5-6 : The Correlation Matrix between the Current Ratio and the set of Net Industry-Specific Effects (Regressions *1* and *2*).

	CR
Net ISE (R1)	-0.090
Net ISE (R2)	-0.221

The 'a priori' expectations are not confirmed by the correlation matrix (table *5-6*) between the mean firm current ratio for an industry and the set of net industry-specific effects. A negative but statistically insignificant correlation emerges between the current ratio and net industry-specific effects. :-

Figure 5-3 : The Current Ratio Versus the set of Net Industry-Specific Effects (Regression *2*)



The short-term financial strength of the firm - as measured by the current ratio - does not appear to be a significant underlying factor in net industry-specific effects in profit. However, there are a number of alternative measures of the financial strength of the firm which are provided by published accounting data.

5.5 Intra-Industry Differences : Income Gearing and Borrowing in Scottish Industry

5.5.1 'A Priori' Expectations

This section evaluates evidence for a correlation between the set of net industry-specific effects and the following accounting ratios :-

1. The *Borrowing Ratio*,
2. The *Income Gearing Ratio*.

The borrowing ratio (BR) measures the *total debt* as a proportion of the *net worth* of the firm :-

$$BR = \frac{\text{Total Debt}}{\text{Net Worth}} . \qquad \text{Eqn. (5.5)}$$

Income gearing is another means of measuring the debt burden facing the firm :-

$$\text{Inc. Gr.} = \frac{\text{Interest Payments}}{\text{Pre - Interest Profit}} \times 100 , \qquad \text{Eqn. (5.6)}$$

in this case expressing the firm's *compulsory interest payments* on debt as a percentage of *pre-interest profit income*. 'A priori' expectations are straightforward for both variables - an increase in the relative importance of liabilities ceteris paribus reduces profit levels.

5.5.2 The Borrowing Ratio and Income Gearing as Industry-Specific Effects

Table 5-7 : Mean Firm Borrowing and Income Gearing Ratios Versus the set of Net Industry-Specific Effects (Regressions *1* and *2*)

Industry Type	BR	Inc.Gr.	Net ISE (R1)	Net ISE (R2)
Building Contractors	1.5	24.5	1.117	1.687
Builders' Merchants	1.1	24.9	-0.758	-1.125
Electronic Components	5.8	68.7	-5.740	-4.413
Industrial Rubber	0.8	13.9	-5.914	-5.698
Industrial Valves	0.3	49.4	0.086	-0.822
Knitwear Manufacture	4.0	31.4	2.539	2.634
Oil Services	1.3	36.6	-3.359	-5.434
Paper Manufacture	0.8	16.4	3.049	1.994
Petroleum Distribution	2.6	25.3	1.845	2.392
Plant Hire	2.1	41.0	-0.792	-0.112
Slaughterers	1.1	60.7	-3.676	-3.605
Steel Merchants	0.9	60.3	-1.409	-2.184
Textile Manufacture	1.1	33.9	-1.261	-1.226
Timber Merchants	1.7	33.3	2.652	2.751
Vehicle Distribution	1.2	48.6	1.450	2.319
Whisky Distilling	2.8	26.3	10.176	10.848

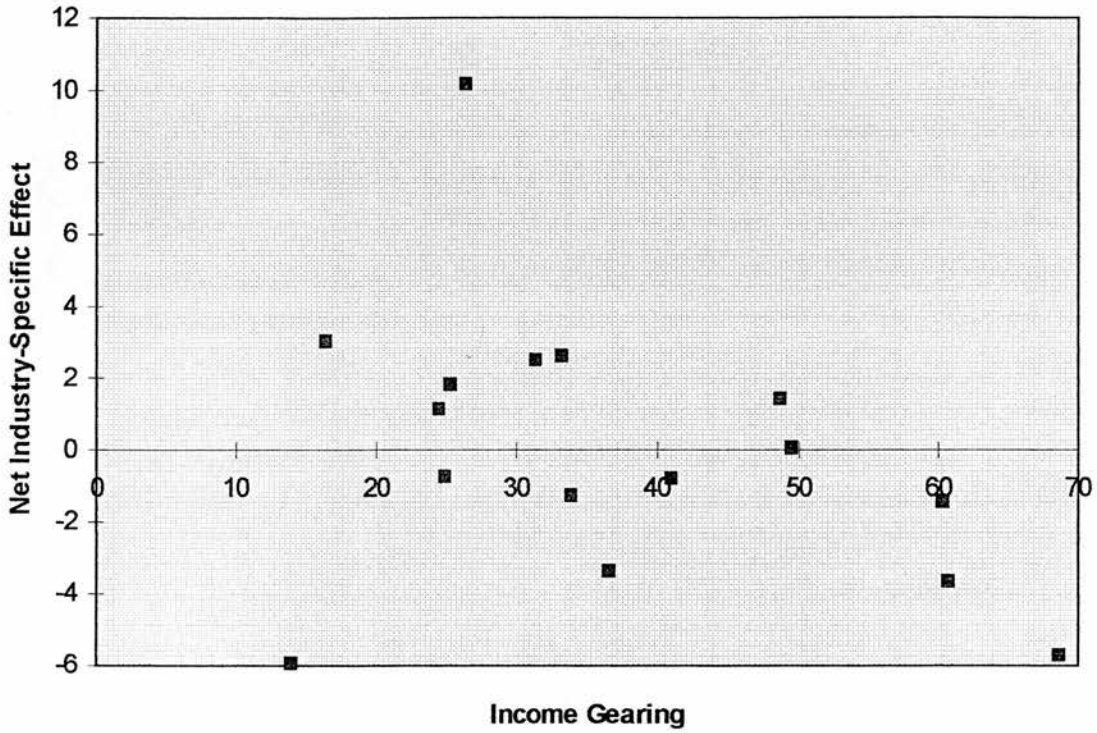
Table 5-8 : The Correlation Matrix between the Borrowing Ratio and Income Gearing and the set of Net Industry-Specific Effects (Regressions *1* and *2*).

	BR	Inc.Gr.
Net ISE (R1)	0.027	-0.384*
Net ISE (R2)	0.144	-0.339*

notes: * indicates that the correlation coefficient is statistical significance at the *10* per cent level.

There appears to be no significant correlation between the borrowing ratio and net industry-specific effects. For income gearing, a significant negative correlation is present between debt interest payments as a proportion of profit income and net industry-specific effects :-

Figure 5-4 : Mean Firm Income Gearing Versus the set of Net Industry-Specific Effects (Regression *1*)



This result is mitigated by the extent to which it is a comparison of 'like with like'. That is, an income gearing ratio in which the denominator is *pre-interest firm profit* and net industry-specific effects in *industry profit*. There is a *natural* negative correlation between the two sets of variables.

5.6 Intra-Industry Differences : Firm Location and Firm Exports in Scottish Industry

5.6.1 'A Priori' Expectations

That firms apparently belong within an industry belies the possibility that they do not supply the same market [Weiss (1972)]. The geographical location of firms may reflect a regional supply network, where local firms enjoy the benefits of a niche market. This is particularly true of the retail sector where vehicle and timber distribution is best described by a set of regional markets each with a number of suppliers.

Conversely, manufacturing markets are geographically nearly always international, as is the case with Scottish electronic component and textile manufacture. However, these suppliers of extra-national Scottish markets are typically located in an 'industrial belt' congenial to that industry's needs. The *spatiality between firms* is relatively low and the *industry export ratio* (XR) :-

$$XR = \frac{\text{sales value of industry exports}}{\text{industry turnover}}, \qquad \text{Eqn. (5.7)}$$

is significant for these industries.

Assessing the degree of spatiality may have implications for the set of net industry-specific effects in profit. Significant spatiality between firms may imply niche marketing that increases the 'apparent' industry profit-sales ratio. Alternatively, markets with a low degree of spatiality increases the probability of suppliers being in genuine competition with one another. It follows that it is necessary to investigate the link, if any, between spatiality in Scottish industry with the set of net industry-specific effects.

5.6.2 Firm Location and Industry-Specific Factors

In table *5-9* each set of industry incumbents are grouped according to their *geographical location* by *Unitary Authority*. The approximation of regional markets by Unitary Authority may or may not be reasonable. However, it remains a relatively simple and straightforward method of comparing the spatial distribution of Scottish industries. The *area codes* are therefore denoted as follows :-

DISTRICT	CODE
Highlands	HLAND
Aberdeenshire	ABD
Argyll & Bute	AGY
Perth & Kinross	PTH
Fife	FIFE
Stirling	STIR
Lothian	LTH
Borders	BDS
Dumfries & Galloway	DMF/GAL
Ayrshire	AYR
Glasgow[4]	GW
Lanarkshire	LNK
Falkirk	FLK
Morayshire	MORAY
Angus	ANGUS

Table 5-9 : Number of Industry Incumbents Grouped by Geographical Location

Industry Type	HLAND	ABD	AGY	PTH	FIFE	STIR	LTH	BDS
Building Contractors	3	7	0	4	2	1	8	0
Builders' Merchants	1	3	0	2	0	0	3	0
Electronic Components	1	0	0	1	2	0	1	5
Industrial Rubber	0	0	0	2	0	1	0	0
Industrial Valves	0	0	0	0	1	0	0	0
Knitwear Manufacture	1	3	1	0	2	0	0	9
Oil Services	0	6	0	1	1	0	0	0
Paper Manufacture	0	3	0	0	5	0	1	1

Petroleum Distribution	2	4	0	0	1	0	2	1
Plant Hire	0	1	0	3	0	0	7	0
Slaughterers	1	1	0	0	0	0	6	1
Steel Merchants	0	2	0	0	0	0	2	0
Textile Manufacture	0	1	0	3	2	0	2	2
Timber Merchants	1	1	0	1	3	2	4	1
Vehicle Distribution	5	6	0	8	2	1	13	3
Whisky Distilling	3	3	0	3	0	0	7	0

Industry Type	DMF/GAL	AYR	GW	LNK	FLK	MORAY	ANGUS
Building Contractors	2	1	24	3	1	0	0
Builders' Merchants	0	1	10	3	0	0	0
Electronic Components	0	1	1	0	0	0	0
Industrial Rubber	1	0	2	0	0	0	0
Industrial Valves	0	1	4	0	0	0	0
Knitwear Manufacture	4	6	1	2	0	0	0
Oil Services	0	0	1	0	0	0	0
Paper Manufacture	0	0	0	0	0	0	0
Petroleum Distribution	0	1	1	0	1	0	0
Plant Hire	0	1	15	2	1	0	1
Slaughterers	0	2	7	3	0	0	1
Steel Merchants	0	0	1	4	0	0	0
Textile Manufacture	0	1	1	0	0	0	2
Timber Merchants	1	3	10	1	4	1	0
Vehicle Distribution	2	6	20	9	0	0	0
Whisky Distilling	0	1	15	2	0	2	1

Table *5-10* compares the *geographical concentration index* (GCI), the export ratio (XR) and the set of net industry-specific effects. The geographical concentration index for industry (*N*) is defined as :-

$$GCI_N = \frac{\text{No. of Incumbents in the largest } k \text{ sub-markets}}{\text{Total No. of Industry Incumbents}}, \qquad \text{Eqn. (5.8)}$$

where (k=2) in table *5-10*. It follows that an industry whose incumbent firms are located throughout many of the UAs of Scotland will have a lower GCI than an industry with a few prime locations[5].

Table 5-10 : The GCI and Export Ratio (XR) Versus the Set of Net Industry-Specific Effects

Industry Type	GCI	XR	Net ISE (R1)	Net ISE (R2)
Building Contractors	0.55	0.5	1.117	1.687
Builders' Merchants	0.57	-	-0.758	-1.125
Electronic Components	0.58	36.8	-5.740	-4.413
Industrial Rubber	0.67	49.9	-5.914	-5.698
Industrial Valves	0.83	36.3	0.086	-0.822
Knitwear Manufacture	0.52	44.4	2.539	2.634
Oil Services	0.78	0.0	-3.359	-5.434
Paper Manufacture	0.80	15.0	3.049	1.994
Petroleum Distribution	0.46	0.0	1.845	2.392
Plant Hire	0.71	-	-0.792	-0.112
Slaughterers	0.59	2.6	-3.676	-3.605
Steel Merchants	0.67	4.9	-1.409	-2.184
Textile Manufacture	0.36	33.4	-1.261	-1.226
Timber Merchants	0.42	0.6	2.652	2.751
Vehicle Distribution	0.44	0.0	1.450	2.319
Whisky Distilling	0.59	35.0	10.176	10.848

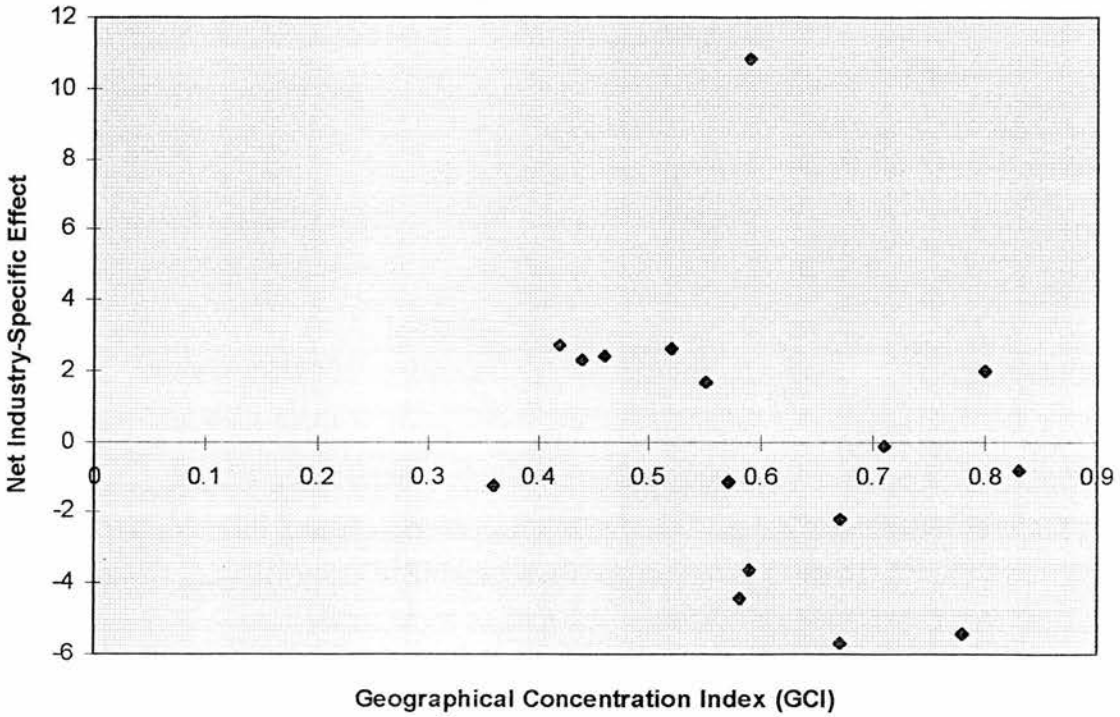
Table 5-11 : The Correlation Matrix between the GCI, Export Ratio and the set of Net Industry-Specific Effects (Regressions *1* and *2*).

	GCI	XR
Net ISE (R1)	-0.174	-0.069
Net ISE (R2)	-0.289	-0.028
GCI	-	0.134

Table *5-11* confirms a positive but insignificant correlation between the geographical concentration index (GCI) and the export ratio (XR). This appropriate sign indicates some support for the hypothesis that spatially concentrated industries generally export, being part of a wider international product market.

A negative correlation between the GCI and net industry-specific effects indicates that spatial diversity may reflect the presence of niche markets - the regression *2* correlation coefficient falls marginally short of the *10* per cent significance boundary. The implication of significant numbers of niche markets within an industry is that it enables the respective incumbents to justify higher price-cost margins protected by niche market barriers to entry.

Figure 5-5 : The Geographical Concentration Index (GCI) Versus the set of Net Industry-Specific Effects (Regression *2*)



5.7 Industry-Per-Time-Period Effects : Evidence for Underlying Factors

This section summarises those underlying factors which are significant in the set of *net industry-per-time-effects*[6]. The analysis is analogous to that used for net industry-specific effects; the 'a priori' expectations are also retained. The following table is a correlation matrix of a familiar set of variables from accounting data and the set of net industry-per-time-period effects estimated from *4.2* (specification *1*) :-

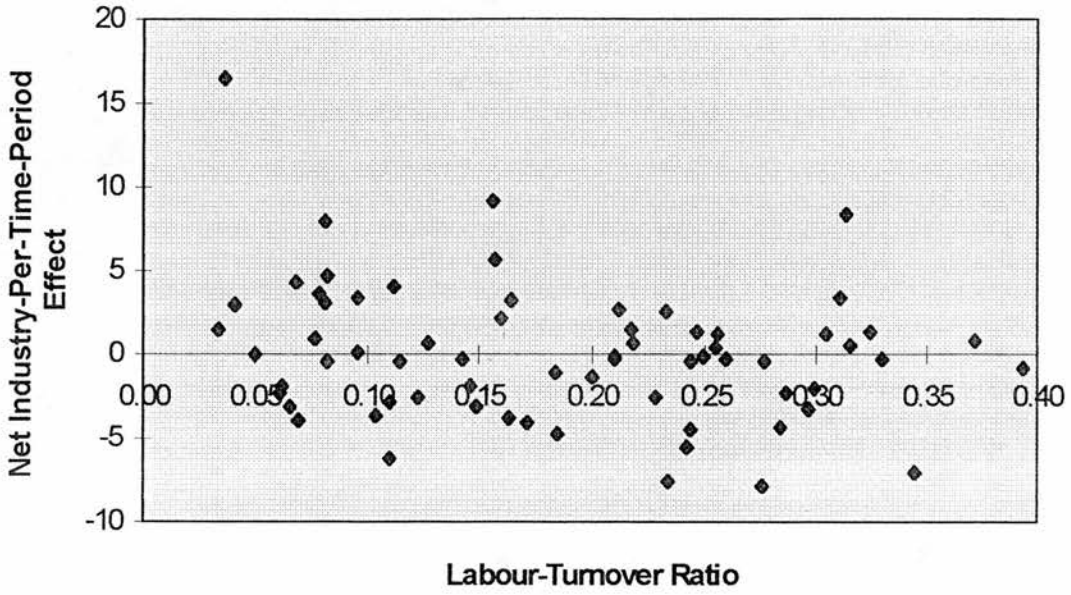
Table 5-12 : The Correlation Matrix between (IO_L), (IO_K), (FA/L), (CR), (BR), Income Gearing, (XR) and the set of Net Industry-Per-Time-Period Effects

	(IO_L)	(IO_K)	FA/L	CR	BR	Inc.Gr.	XR
Net IPTPE	-0.225*	0.109	0.289*	0.154**	-0.043	-0.235*	-0.249*

notes: * &** indicates that the correlation coefficient is statistical significance at the 5 and *10* per cent level.

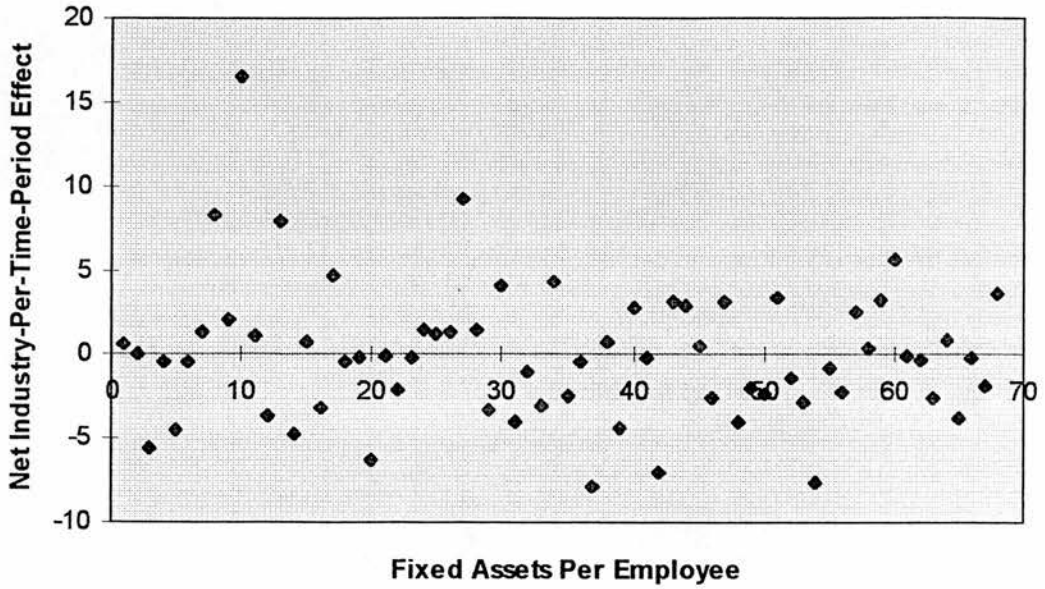
The resulting correlations in table *5-12* are described as congruous with previous results for industry-specific effects with a number of innovations. For example, figure *5-6* describes the statistically significant negative correlation between the labour-turnover ratio and net industry-per-time-period effects, a result first observed using industry-specific effects.

Figure 5-6 : The Labour-Turnover Ratio Versus the Set of Net Industry-Per-Time-Period Effects



A similar conclusion can be drawn for the capital-turnover ratio, the borrowing ratio (BR) and income gearing. As for the other variables, there are some interesting new results in the matrix of correlations. The current ratio (CR) is positively and significantly correlated with net industry-per-time-period effects. Moreover, fixed assets per employee (FA/L) - a crude accountancy proxy for the capital-labour ratio - exhibits a significant positive correlation with net industry-per-time-period effects :-

Figure 5-7 : Fixed Assets Per Employee Versus the Set of Net Industry-Per-Time-Period Effects



Finally, the export ratio is negatively correlated with net industry-per-time-period effects indicating some evidence for niche marketing[7].

5.8 Conclusion

As a general conclusion there is some evidence of linear correlation between the set of net industry-specific effects and certain underlying factors. This is particularly true for labour costs and spatial factors. There is also evidence that industry-per-time-period effects are likewise influenced. In the final chapter of this thesis (excluding the final conclusion), indigenous industry conduct (or conjectural variations) will be explored as an alternative underlying factor in the set of industry-specific effects.

[1] Accounting convention defines capital expenditure as total assets minus current liabilities.

[2] The net industry-specific effect for an industry is defined as the industry-specific effect minus the average value of the set of industry-specific effects.

[3] Specification *3.4* incorporates two measures of concentration - the *3*- and *5*-firm concentration ratios - hence, the use of regressions *1* and *2*.

[4] Glasgow encompasses Inverclyde, Renfrewshire, East Renfrewshire, Dunbarton & Clydebank and East Dunbartonshire.

[5] Note that the GCI is an analogous concept to the firm concentration ratio.

[6] Net industry-per-time-period effects are analogous to net industry-specific effects - equal to the industry-per-time-period effect minus the average value.

[7] Based on the proposition that typically centralised markets are the main exporters.

CHAPTER 6 INDIGENOUS INDUSTRY CONDUCT

6.1 Indigenous Industry Conduct - the Playing of Games

This chapter concentrates on indigenous industry conduct (the playing of games specific to an industry) as a possible source for the set of industry-specific effects in profit. What differentiates indigenous industry conduct from other variables is that it is a difficult factor to measure. In this chapter both a theoretical and empirical case is made for the presence of indigenous conduct.

6.2 Indigenous Industry Conduct : a Theoretical Case

Indigenous industry conduct is defined as conduct which is industry-specific and is *not* some function of the set of structural regressors :-

- Concentration Ratio (CR3/5),
- Advertising Intensity (ASR),
- Economies of Scale (MEFS),
- Import Penetration (MP),
- Growth Rate (g),
- Average Revenue Product for Labour (ARP).

The presence of indigenous industry conduct is unquestionable in the light of modern IO literature. It is perfectly plausible that firms will play different games across industries [Davies (1994)]. For example, oligopolists in one industry will play a dissimilar game to oligopolists in another. Given the same concentration level, an infinite number of scenarios are possible depending on the reaction functions of industry incumbents [Martin (1993)].

Section *6.2.1* presents an introduction to indigenous industry conduct, including the internal structure of the firm and how this influences conjectural variations. Sections *6.2.2* and *6.2.3* present two models which argue that indigenous industry conduct can be represented by the inclusion of an additional parameter in the industry demand function. In effect, indigenous conduct arises as a result of a change in the nature of the industry demand function. This is followed by an empirical analysis of indigenous conduct using the proxy *firm market share turbulence*.

6.2.1 Game Theory, Conjectural Variations and Indigenous Conduct

The emergence of *game theory* as a major branch of industrial organisation was made possible by a particular weakness in the SCP framework : all interaction between firms - competitive or non-competitive - is *specific to industry structure*. As this weakness became increasingly apparent, the demand for models where the interaction between firms is *not* specific to market structure, was inevitable. Game theory to some extent satisfied this demand.

Game theory or *conjectural variations* models then share one common feature : structure is not fundamental in determining the profit allocation between firms. On the contrary, it is the perceptions and motivations of *rational strategic agents* [Ulph (1983)] operating within their respective firms that drives the market outcome. This phenomenon is modelled as the *conjectural variation*.

Suppose two industries A and B are structurally identical (as defined above). It follows that the profit rates in both industries A nd B would be identical. This would be the prediction of the SCP Paradigm. However, profit rates will continue to vary between industries with variations in indigenous industry conduct (or conjectural variation). This can be shown as follows.

A set of outputs $(x_1, x_2, \ldots\ldots, x_n)$ is a *Cournot-Nash equilibrium* when no single firm can modify its output level that it earns additional profits. Defining the following variables as:-

Π_i	-	firm *i*'s level of profits,
x_i	-	firm *i*'s level of output,
X	-	the total industry output,
c_i	-	firm *i*'s cost level,
p	-	the industry price level;

then, the conditions for a Cournot-Nash equilibrium are :-

$$d\Pi_i / dx_i = 0 \text{ and } d^2\Pi_i / dx_i^2 < 0 . \qquad \text{Eqn. (6.1)}$$

Taking the total derivative of firm *i*'s profit function $[px_i - cx_i]$ and summing over all n firms implies that :-

$$\frac{p\sum x_i - \sum c_i x_i}{pX} = \sum_{i=1}^{n}\left(\frac{x_i}{X}\right)^2\left(-\frac{X}{p}\frac{dp}{dX}\right). \qquad \text{Eqn. (6.2)}$$

Redefining *6.2* yields the following structure-performance relationship :-

$$\frac{\Pi}{R} = \frac{pX - \sum c_i x_i}{pX} = \frac{H}{\eta}, \qquad \text{Eqn. (6.3)}$$

where, H denotes the Herfindahl index , R total industry sales, and η the price elasticity of demand. This equation defines the Cowling-Waterson (1976) model, which states that the industry profit-sales ratio is proportional to the Herfindahl index of concentration and inversely related to the price elasticity of demand.

As before, the profit rates in both industries A nd B would be identical. However, *6.3* can be modified to include a *weighted conjectural variation term*. Consider the expression :-

$$\frac{\Pi}{R} = \frac{H}{\eta}(1+\mu)\,, \qquad \text{Eqn. (6.4)}$$

where; $\mu = \sum s_i^2 \psi_i / \sum s_i^2$,

s_i = firm *i*'s market share,

and :- $\psi_i = \frac{dX_i}{dx_i}$ is firm *i*'s conjectural variation term.

The conjectural variation term (ψ_i) measures firm *i*'s expectation of the output response from the remainder of the industry to a change in its own output. For example, significant reaction from rivals will discourage a firm from 'pushing through' its output-increasing or price-cutting measures. In these circumstances the competitive process is limited with firms continuing to earn abnormal profits. The competitive process is oligopolised, a phenomenon which is characterised by a significant *dynamic* conjectural variation term [Bresnahan (1987)].

Alternatively, in a static or one-period game, a high conjectural variation term indicates the presence of collusion between incumbents, while a low conjectural variation term Cournot competition. In a one period model a set of conjectural variations greater than zero is theoretically impossible. Firms simply do not have the time to react to another's output adjustment. If they do then this implies prior knowledge of the structure of the game and points to the presence of collusion [Bresnahan (1987)].

In conjectural variations models, competition arises not because of the number of firms, but rather how an oligopolist *conjectures* as to the response of a rival incumbent. It follows that competition is possible in a duopoly framework, an outcome disallowed under the SCP Paradigm. To conclude, the conjectural variation is unconditioned by the traditional elements of market structure [Tirole (1990)]; in the language of this thesis it embodies *industry-specific* or *indigenous industry conduct*.

In terms of industries A and B, althought structurally identical, an extensive range of profit outcomes are possible according to how incumbents react to one another. What then determines the conjectural variation, the building-block of all game theory models? A number of simplifying assumptions are implicit in a model description of conjectural variations. Firstly, the range of values that the conjectural variation of the firm may take lie between :-

$$0 \leq \psi_i \leq 1 \,, \qquad \text{Eqn. (6.5)}$$

where, $\psi_i = 0$ defines Cournot competition,

$\psi_i = 1$ defines Bertrand competition.

A conjectural variation equal to zero, where each firm expects a non-output response from rivals defines Cournot competition. This conjectural variation in all likelihood represents a simplifying assumption one too many [Martin (1993)]. More important however, even with models that incorporate consistent conjectures - as in Bertrand competition - the model is solved on the basis that all incumbents share the same conjectures [Krouse (1990)]. This qualification ignores the fact that conjectures are *firm-specific*.

As highlighted above, the conjectural variation of the firm represents the final outcome of a process of decision-making by internal strategic agents within that firm. It follows that the conjectural variation of the firm will depend on :-

1. the *internal structure* of the firm,
2. the *cultural background* within the firm,
3. an awareness of *previous conjectures* (correct or incorrect).

The internal structure of and cultural background within the firm reflect a non-classical input into the industry profit determination. Both factors will exert a dominant influence on strategic agent decision-making. A strong vertical hierarchy coupled with an aggressive tradition of 'doing business' is quickly incorporated into rival firms' set of conjectures. Predatory pricing and aggressive takeover bids are increasingly the function of corporate rivalry rather than over zealous competition between many incumbents. For example, the British Airways and Virgin Atlantic rivalry is perpetually fueled by a 'Bertrand and beyond' set of conjectures. It is this phenomenon that is a real-world example of indigenous industry conduct, independent of real market conditions.

The third determinant of firm conjectural variations - an awareness of previous conjectures - alludes to the problem of making an accurate conjecture of a rivals' response with imperfect informational. A firm will adjust its conjecture through time either adaptively or form a rational expectation. The ability of all firms to vary their output response means that the latter learning procedure is the more likely.

It follows then that the industry- and firm-specificity of conjectural variations makes for an infinite range of indigenous industry conduct outcomes. It is unsurprising therefore that the set of industry-specific effects are referred to as *idiosyncratic parameters* [Katics and Peterson (1993)]. If indigenous conduct is a significant underlying factor in the set of industry-specific effects, then an idiosyncratic distribution is certain.

6.2.1 Modelling Indigenous Conduct Using Demand in a Cournot Framework : A Twofold Conduct (TFC) Model with default Cournot Conduct

An alternative specification of indigenous conduct is summarised in the following two models :-

1. A Twofold Conduct (TFC) Model with default Cournot Conduct,
2. A Twofold Conduct (TFC) Model with default Bertrand Conduct.

In the absence of indigenous conduct effects (*intra-industry conduct*), the models default to Cournot [Cournot (1838)] and Bertrand [Bertrand (1883)] competition respectively. In terms of twofold conduct models, such conduct is referred to as *inter-industry conduct*.

The assumptions of the *Twofold Conduct Model* (TCM) *with default Cournot Conduct* for N industries are :-

1. The number of firms m in each industry $\{\mathrm{I}:\mathrm{I} \in 1,2,\ldots,\mathrm{N}\}$ is a function of *industry structural endowment* $(\mathrm{W}^{\mathrm{I}})$, defined as :-

$$\mathrm{W}^{\mathrm{I}} = \alpha_0^{\mathrm{I}} + \alpha_1^{\mathrm{I}}\mathrm{CR3}^{\mathrm{I}} + \alpha_2^{\mathrm{I}}\mathrm{ADV}^{\mathrm{I}} + \alpha_3^{\mathrm{I}}\mathrm{MEFS}^{\mathrm{I}} + \alpha_4^{\mathrm{I}}\mathrm{MP}^{\mathrm{I}} + \alpha_5^{\mathrm{I}}\mathrm{g}^{\mathrm{I}} + \alpha_6^{\mathrm{I}}\mathrm{ARP}^{\mathrm{I}}, \qquad \text{Eqn. (6.6)}$$

where, for example :-

$$\mathrm{m}^{\mathrm{I}} = f(\mathrm{W}^{\mathrm{I}}) = \mathrm{a} - \mathrm{bW}^{\mathrm{I}}, \qquad \text{Eqn. (6.7)}$$

$$a > b\mathrm{W}^{\mathrm{I}} \text{ and } b > 0 .$$

Note that $(b > 0)$ ensures the structural endowment W varies inversely with the number of incumbent firms. Ceteris paribus, less incumbent firms must mean more profitable market conditions - a greater structural endowment.

Moreover, all industries share the structural characteristics defined above. These structural characteristics need not be quantitatively equal between industries. However, the *qualitative nature* of market structure is shared between industries, hence *the inter-industry properties of market structure*. Market structure conditions through the default inter-industry Cournot conduct, *inter-industry prices* and *profits*.

2. All industries have identical marginal costs $\left(c^1 = c^2 = \ldots = c^N\right)$. It follows then that the *inter-industry price-output set* [p(I),q(I)], a function of market structure as proxied by the structural endowment *W*, may be given as :-

$$q(I) = \frac{S}{f(W^I)+1}, \qquad \text{Eqn. (6.8)}$$

$$p(I) = c + \frac{bS}{f(W^I)+1}. \qquad \text{Eqn. (6.9)}$$

Ceteris paribus, the greater the structural endowment *W* in an industry, the higher the *inter-industry profit level* :-

$$\Pi(I) = \left(\frac{bS}{f(W^I)}\right)Q^I, \qquad \text{Eqn. (6.10)}$$

and *inter-industry profit-sales ratio* $\left[\Pi(I) / Q^I\right]$:-

$$\frac{\Pi(I)}{Q^I} = \frac{bS}{f(W^I)+1}. \qquad \text{Eqn. (6.11)}$$

3. Indigenous conduct across industries is modelled through *an industry-specific residual demand function* analogous to a *product differentiation specification* [Martin (1994)]. Suppose that firm *m*'s output is an imperfect substitute of another incumbent's.

The *residual demand function* for firm *m* is then :-

$$p^m = a - b\left(q^m + \theta Q_{-1}^N\right), \qquad \text{Eqn. (6.12)}$$

where, $0 \leq \theta \leq 1$.

The value of (θ) determines the degree of product differentiation that firm *m* enjoys. For example, if $(\theta = 0)$, then $\left(p^m = a - bq^m\right)$, and firm *m* is a *monopolist of its own brand.* As for the homogeneous product solution, this holds when $(\theta = 1)$. In other words, (θ) measures the proportional response of all the remaining incumbents to the output of firm *m*. Product differentiation enables the firm to expect less than a one-to-one response from rivals because of the presence of market segmentation.

For the purposes of modelling industry-specific conduct the assumption of homogeneity in an industry's product is made, while retaining the [Martin (1994)] product differentiation specification. The residual demand function, now for industry *N* is :-

$$p^{mN} = a - b\left(q^{mN} + \theta^N Q_{-1}^N\right), \qquad \text{Eqn. (6.13)}$$

where, the coefficient $\left(\theta^N\right)$ describes indigenous industry conduct in *N*.

Industry-specific conduct is a product of differences in the cross-industry demand function, a phenomenon modelled by changes in $\left(\theta^N\right)$. This ensures that the *reaction functions* of incumbents vary with indigenous industry conduct.

Therefore, if $\left(\theta^N = 1\right)$, the residual demand function for industry *N* :-

$$p^{mN} = a - b\left(q^{mN} + Q_{-1}^N\right), \qquad \text{Eqn. (6.14)}$$

corresponds to the Cournot-oligopoly solution. Conversely, if $(\theta^N = 0)$, then *6.14* decomposes to $(p^{mN} = a - bq^{mN})$. Competition is not present in industry *N* as no output response from *m-1* firms is incorporated into firm *m*'s residual demand function. As in own-brand monopolisation there is no competitive interface between incumbents. Concluding, $(0 < \theta^N \leq 1)$ is a range of possible solutions for indigenous industry conduct within the limits of Cournot competition $(\theta^N = 1)$ and monopoly $(\theta^N = 0)$.

The expressions for *intra-industry output, prices and profit* are therefore analogous to product differentiation :-

$$q^I = \frac{S}{2 + \theta^I(m-1)}, \qquad \text{Eqn. (6.15)}$$

$$p^I = c + \frac{S}{2 + \theta^I(m-1)}, \qquad \text{Eqn. (6.16)}$$

$$\frac{\Pi^I}{Q^I} = \frac{bS}{2 + \theta^I(m-1)}. \qquad \text{Eqn. (6.17)}$$

For two industries *M* and *N* with identical market structures, it follows a profit discrepancy between the two industries $(\Pi^M \neq \Pi^N)$ will continue to be observed if $(\theta^M \neq \theta^N)$, an almost certain outcome. The inclusion of (θ^I) in the industry residual demand function provides an interesting specification of intra-industry conduct.

6.2.2 Modelling Indigenous Conduct Using Demand in a Bertrand Framework : A Twofold Conduct (TFC) Model with default Bertrand Conduct

The *twofold conduct (TFC) model with default Bertrand conduct* has an inter-industry conduct - conditioned by market structure - 'price equals marginal cost' (P=MC) solution :-

$$p(1I) = p(2I) = ... = p(mI) = c(I) \quad \text{Eqn. (6.18)}$$

where, $c(I) = f(W^I)$.

Industry marginal cost - and not the number of incumbent firms - is a function of the industry's structural endowment (W^I), revoking assumptions *1* and *2* (see above). This alternative assumption set ensures that both twofold conduct models are not completely analogous.

The *inter-industry profit-sales ratio* then is :-

$$\frac{\Pi(I)}{p(I)Q(I)} = 1 - \frac{c(I)Q(I)}{p(I)Q(I)} \quad \text{Eqn. (6.19)}$$

Given that $[p(I) = c(I)]$:-

$$\frac{\Pi(I)}{p(I)Q(I)} = 0 \quad \text{Eqn. (6.20)}$$

a *normal profit solution*, as inter-industry conduct is identified with the *Bertrand equilibrium (P=MC)* for the industry.

Conversely, *intra-industry conduct* is specific to each industry through the industry's consumption set (the demand function). To model intra-industry conduct in a Bertrand setting, the following demand functions have been rewritten in direct format, with price p the strategic variable :-

$$q^1 = \frac{S}{1+\theta} + \frac{\theta}{b}\frac{p^2 - c}{1-\theta^2} - \frac{1}{b}\frac{p^1 - c}{1-\theta^2}, \qquad \text{Eqn. (6.21)}$$

$$q^2 = \frac{S}{1+\theta} + \frac{\theta}{b}\frac{p^1 - c}{1-\theta^2} - \frac{1}{b}\frac{p^2 - c}{1-\theta^2}. \qquad \text{Eqn. (6.22)}$$

Maximising the profit functions :-

$$\Pi^1 = (p^1 - c)q^1, \qquad \text{Eqn. (6.23)}$$

$$\Pi^2 = (p^2 - c)q^2, \qquad \text{Eqn. (6.24)}$$

with respect to (p^1) and (p^2) and substituting for (q^1) and (q^2) :-

$$p^1 = c + \frac{1}{2}\left[(1-\theta)bS + \theta(p^2 - c)\right], \qquad \text{Eqn. (6.25)}$$

$$p^2 = c + \frac{1}{2}\left[(1-\theta)bS + \theta(p^1 - c)\right]. \qquad \text{Eqn. (6.26)}$$

Solving simultaneously, ensures the equilibrium condition for m firms and N industries:-

$$p^{m1} = p^{m2} = \ldots = p^{mN} = p^I = c(I) + \frac{1-\theta^I}{2-\theta^I} bS(I). \qquad \text{Eqn. (6.27)}$$

where, (p^I) is the intra-industry price, and (θ) models industry-specific demand. The industry-specific nature of demand implies that for indigenous industry conduct (as above), there are a range of values for (θ^I). Firstly, substituting $(\theta^I = 1)$ into *6.27* ensures that :-

$$p^I = c(I) , \qquad \text{Eqn. (6.28)}$$

a restatement of Bertrand competition (P=MC), where indigenous industry conduct is not present. At the opposite extreme $(\theta^I = 0)$, in which case indigenous industry conduct is identified by monopoly pricing :-

$$p^I = c(I) + \frac{1}{2} bS(I) . \qquad \text{Eqn. (6.29)}$$

It follows that in the range $(0 \leq \theta^I \leq 1)$, there exists a continuum of varying degrees of competition as a description of indigenous industry conduct. This ranges from a monopoly solution (P>MC) and $(\theta^I = 0)$ to the Bertrand solution (P=MC) and $(\theta^I = 1)$, the latter indistinguishable from inter-industry conduct. By a process of substitution, intra-industry profits is given by :-

$$\Pi^N = \frac{1 - \theta^N}{2 - \theta^N} bS(N)Q^N , \qquad \text{Eqn. (6.30)}$$

and the intra-industry profit-sales ratio as :-

$$\frac{\Pi^N}{p^N Q^N} = \frac{1 - \theta^N}{2 - \theta^N} \frac{a - c(N)}{p^N} . \qquad \text{Eqn. (6.31)}$$

6.2.3 Inter- and Intra-Effects : Relaxing the Mutual Exclusion Principle

In discussing twofold conduct (TFC) models, *inter-* and *intra-industry effects* have been analysed as ***mutually exclusive identities***. Integrating the inter- and intra-industry variables is reasonable straightforward. Consider the inter- and intra-industry profit-sales ratios in the twofold conduct (TFC) model with default Cournot conduct :-

$$\frac{\Pi(N)}{Q(N)} = \frac{bS}{f(W^N)+1}, \qquad \text{Eqn. (6.32)}$$

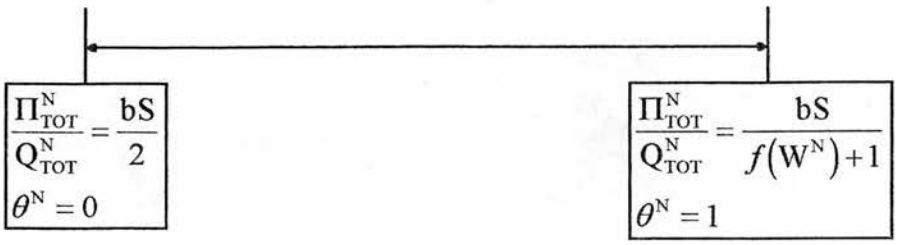
$$\frac{\Pi^N}{Q^N} = \frac{bS}{\theta^N(m-1)+2}. \qquad \text{Eqn. (6.33)}$$

Total industry profits for industry *N* then is written as :-

$$\frac{\Pi^N_{TOT}}{Q^N_{TOT}} = \frac{bS}{\theta^N\left[f(W^N)-1\right]+2}. \qquad \text{Eqn. (6.34)}$$

an identical expression to intra-industry profits, except for the function $\left[m = f(W^N)\right]$ where *W* is the structural endowment. The value for *m* substitutes directly into *6.34* reflecting the contribution of structure - along with the intra-industry conduct variable (θ^N). The intuition behind *6.34* is best observed by constructing a *continuum or spectrum of profit* as shown in figure *6-1* (shown overleaf):-

FIGURE 6-1 : A Continuum of Profit in the Twofold Conduct (TFC) Model with default Cournot Conduct



Re-employing the analogous concept of product differentiation, the inter-industry profit-sales ratio is a special case or point on a spectrum of intra-industry profit-sales ratios solutions with definite boundaries $(0 \leq \theta^N \leq 1)$. Where $(\theta^N = 1)$, the TFC model defaults to its inter-industry solutions, including Cournot competition. The effects of indigenous industry conduct however is to induce the model away from the inter-industry solution. This will occur if the condition $(\theta^N \neq 1)$ holds, as in for example the monopoly solution $(\theta^N = 0)$.

Is it possible then to get some empirical 'handle' on indigenous industry conduct? In the following section the rate of *firm market share turbulence* is analysed as a proxy for the intensity of rivalry in the industry.

6.3 Firm Market Share Turbulence : A Proxy for Indigenous Conduct

Proxying indigenous industry conduct with firm market share turbulence [Davies and Geroski (1997)] implies a set of 'a priori' expectations for the following categories of conduct :-

1. Dominant Firm : Defined as a *40* per cent market share for the largest incumbent firm, a dominant firm is also expected to hold this market share position each period [Bishop, Kay and Mayer (1994)]. This ensures an 'a priori' expectation of zero firm market share turbulence in the industry's largest firm.

2. Dominant Oligopoly : Categorised as 'loose' and 'tight', the 'a priori' expectation for an oligopoly of firms is the presence of firm market share turbulence within and outwith its bounds, but not between.

3. Colluding Oligopoly : The same as in *2* but no firm turbulence within the oligopoly of firms. Colluding firms will typically observe their respective ordering as a result of fulfilling the terms of the actual collusion [Reid (1987)]. Firm market share turbulence however continues to be observed outwith the collusive group in the 'fringe' of firms [Reid (1987)].

4. Competition : The 'a priori' expectation for competition is that it is typically associated with firm market share turbulence across a larger number of incumbent firms than in *1* and *2*.

The following sequence of tables review incumbent firm market share turbulence in each Scottish industry during the period *1983-88*. Each individual column describes the relative market share positions of the *largest firms*[1] in an industry. A *split table* denotes either a dominant firm, or a market share division that divides a dominant or collusive oligopoly of firms from the remaining 'fringe'. The likely nature of indigenous conduct for the industry on the basis of 'a priori' expectations *1* to *4* follows each table.

[1] The largest firms in each industry are defined as having not less than *5* per cent turnover of the largest incumbent, subject to a minimum and maximum of *5* and *15* firms respectively.

Tables 6-1 : Market Share Turbulence in Seventeen Scottish Industries (1983-88)

Builders' Merchants	1983	1984	1985	1986	1987	1988
Briggs Amasco	1	1	1	1	1	1
J. & W. Henderson	2	2	2	2	2	2
Alexander Russell PLC.	3	5	7	4	3	3
William Wilson & Co.	4	3	4	5	7	7
Keyline Builders' Merchants	5	4	3	3	4	4
Johnstons & Paton	6	6	5	7	6	5
Monteith Building Services	7	7	6	6	5	6
McCreath Taylor & Co.	8	8	8	9	9	9
Fin-Cairn Holdings	9	9	9	8	8	8
B.J.K. Aitken	10	10	10	14	10	10
Rembrand	11	11	11	10	12	11
W. Arnott & Son	12	14	13	13	14	14
Bon Accord Builders' Service	13	13	12	11	20	22
J. & J. Lawrence	14	12	14	12	13	13
Russlite (Scotland)	15	15	15	16	16	15

Briggs Amasco falls short of the *40* per cent qualification threshold for a dominant firm, although in *1988* the firm held a one third market share, well ahead of any rival. The absence of any firm market share turbulence between the *7* largest firms and the remainder for the period *1983-88* identifies a *dominant oligopoly of firms*. The presence of firm market share turbulence within both strong oligopoly and weak 'fringe' does suggest some measure of competition. *Building merchanting* then is a competitive industry subject to a significant and permanent *oligopoly/fringe division*.

Building Contractors	1983	1984	1985	1986	1987	1988
F.J.C. Lilley PLC	1	1	1	1	1	1
Aberdeen Construction PLC	2	2	2	2	2	2
Barratt	3	3	4	11	34	15
M.D.W. Holdings	4	7	5	4	5	5
J. Lawrence	5	4	3	3	3	4
Charles Gray Builders (Holdings)	6	6	6	10	10	12
Melville, Dundas & Whitson	7	9	9	8	8	9
G.A. Group	8	5	7	6	6	6
Fairclough Scotland	9	10	13	12	12	13
Whatlings	10	11	12	9	9	8
Bett Brothers	11	12	18	18	19	17
Cala PLC	12	13	14	13	7	7

J. Smart & Co.	13	22	31	19	26	29
R.J. McLeod	14	25	20	20	25	16
Miller (Construction)	15	14	10	7	4	3

In *building contracting* the range of firm market share turbulence is more extensive than building merchanting. Competition therefore is not constrained by an oligopoly/fringe division limiting the number of potential competitors from the fringe - an *intra-industry barrier*. For example, *Miller (Construction)*, initially in *fifteenth place* in terms of market share in *1983* is third by *1988*.

Electronic Components	**1983**	**1984**	**1985**	**1986**	**1987**	**1988**
Ferranti PLC	1	1	1	1	1	1

National Semiconductor	2	2	2	2	2	2
Hughes Microelectronics	3	3	3	3	3	3
Beckman Industrial	4	7	7	5	6	6
Exacta Circuits	5	4	5	6	4	4

The salient feature of *electronic components* is the dominant role of *Ferranti PLC*. With a market share equal to *69.9* per cent in *1983*, *Ferranti PLC* is in a position to assume a dominant firm role.

General Haulage	**1983**	**1984**	**1985**	**1986**	**1987**	**1988**
Scottish Road Services	1	1	1	1	1	1
W.H. Malcolm	2	2	2	2	2	2
United Transport Distribution	3	6	3	3	-	-
Charles Alexander & Partners	4	3	4	5	4	5
C. OD D.	5	4	5	4	3	3
Harry Lawson	6	7	7	9	9	10
Sutherland Transport Services	7	5	6	6	6	7
James Hemphill	8	9	11	11	11	11
McKinnon & Co.	9	11	14	16	17	17
Inter-City Transport & Trading Co.	10	8	9	7	7	6
Scottish Exp.	11	10	10	10	5	4
J.R.	12	13	8	8	8	8
Y. & D.	13	12	13	14	18	16
J.G.R.	14	14	12	12	13	15
D.A.	15	15	18	19	19	18

General Haulage is similar to building contracting is that there is no evidence of a dominant oligopoly of firms for the period *1983-88*. A number of firms including the *Inter-City Transport and Trading Company* and *Scottish Express* have penetrated the leading market share positions in the industry, having clearly initially held only a fringe status. Competition then is sufficiently dynamic for these firms to have succeeded in a comparatively short period of time.

Rubber Manufacture	**1983**	**1984**	**1985**	**1986**	**1987**	**1988**
UniRoyal	1	1	1	1	1	1
Day International	2	2	3	3	4	2
MacLellan Rubber	3	3	2	2	2	3
Dayco Rubber	4	4	4	4	3	4
Flexible Ducting	5	5	5	5	5	5

Industrial Valve Prodn.	**1983**	**1984**	**1985**	**1986**	**1987**	**1988**
T.K. Valve	1	1	1	1	1	1
Keystone Valve	2	2	2	2	2	2
Cunningham & Shearer	3	4	4	3	3	3
Glenfield & Kennedy	4	3	3	-	-	-
Clyde Blowers PLC	5	5	6	5	4	5
Henry Valve	6	6	5	4	5	4
Forth Tool & Valve	7	7	7	6	6	6

Industrial rubber and *valve manufacturing* are two industries with relatively few incumbents making it impossible to identify any oligopoly and fringe. The likely conduct set then for both is dominant firm leadership. *UniRoyal* exceeds the *40* per cent qualification by some *30* per cent, while *T.K. Valve* achieves this in any one of two years, without its primary market share position seriously challenged.

Knitwear Manufacture	1983	1984	1985	1986	1987	1988
Pringle of Scotland	1	3	3	3	3	3
E.W.M. Investments	2	1	1	1	1	1
The Edinburgh Woollen Mill	3	2	2	2	2	2
Scottish Worsted & Woollens	4	6	5	5	5	5
The Ballantyne Sportswear Co.	5	4	4	4	4	4
Campsie Knitwear	6	5	6	7	8	9
J. & D. McGeorge	7	8	7	6	6	7
Barrie Knitwear	8	9	9	9	7	6
S.H. MacKinnon & Son	9	7	8	10	-	-
Thomas Smith & Co.	10	10	11	8	10	10
Peter Scott & Co.	11	12	10	12	11	11
Thomas MacKie & Sons	12	13	19	19	17	17
Bute Fabrics	13	17	14	15	14	15
Glenmac Knitwear	14	18	15	13	12	13
R. Laidlaw & Sons	15	14	12	16	19	18

Paper Manufacture	1983	1984	1985	1986	1987	1988
Davidsons'	1	1	1	2	1	2
Tullis Russell & Co.	2	2	2	1	2	1
The Donside Paper Co.	3	3	3	3	4	4
Smith, Anderson & Co.	4	6	4	7	6	6
Dexter Speciality Materials	5	4	5	6	7	7
GB Papers	6	7	7	5	5	5
Thomas Tait & Sons	7	5	6	4	3	3
J.A. Weir	8	8	8	8	8	8
Guard Bridge Paper Co.	9	9	9	9	9	9
W. Sommerville & Sons	10	10	10	10	10	10

Knitwear and paper manufacturing have no dominant firm by the reckoning of firm turnover. For example, in knitwear manufacturing *Pringle of Scotland* is overtaken by *E.W.M. Investments* in *1984* and subsequently retains that position. It is possible however to isolate a dominant oligopoly of firms in both these industries. The leading three firms retain their combined status throughout the period *1984-88* in knitwear manufacturing; with paper manufacture it is the two leading firms - a *dominant duopoly*. Some evidence of a strong 'fringe' in the latter industry is provided by the performance of *Thomas Tait & Sons*, increasing their market position from seventh to third.

Petroleum Distribution	1983	1984	1985	1986	1987	1988
S. & J.D. Robertson Group	1	1	1	1	1	1
Bruce Lindsay Brothers	2	3	4	3	3	4
Highland Fuels	3	2	2	5	4	3
Caledonian Oil Co.	4	4	3	4	2	2
Ellis & McHardy (Oils)	5	5	5	7	6	5
W. Alexander Industries	6	6	6	2	5	8
C.F. Oils	7	9	12	10	9	9
Wilsons Fuels	8	7	7	6	7	6
S.E. Oils	9	10	8	13	14	17
J. Mitchell for Oils	10	11	11	9	10	11
Caley Oils	11	12	9	11	12	13
Johnston Oils	12	8	13	8	8	7
Hurst Fuels	13	13	10	12	-	-
Woodacon Oils	14	14	14	14	11	12

The performance of the *S. & J.D. Robertson Group* in the *petroleum distribution* industry is consistent with the role of increasing domination of the industry. A market share of *16.2* per cent in *1983* has increased to *30.2* per cent by *1988*. Against this is a degree of market share firm turnover that disallows the presence of a dominant oligopoly. For example, the performance of *Johnston Oils*, from twelfth to seventh position in as many years, is suggestive of potentially strong competition from 'fringe' firms.

Plant Hire	1983	1984	1985	1986	1987	1988
Hewden-Stuart Plant PLC	1	1	1	1	1	1
Eddison Plant	2	2	2	2	2	2
Burnthills & Co.	3	4	5	5	6	7
McCreath Taylor & Co.	4	3	3	4	4	6
Reekie Plant	5	5	4	6	5	5
Grampian Plant Hire	6	7	7	7	7	3
Fin-Cairn Holdings	7	6	6	3	3	4

Hewden-Stuart Plant PLC has an average market share for the period *1983-88* of *46.5* per cent making it the dominant firm in the *plant hire* industry. All remaining firms in the industry have relatively small market shares by comparison, including *Eddison Plant* with less than *10* per cent each period.

Oil Services	1983	1984	1985	1986	1987	1988
Lyle Offshore Group	1	3	-	-	-	-
John Wood Group	2	1	1	1	1	1
Seaforth Maritime	3	4	3	3	3	3
Kestrel Marine	4	5	4	4	4	4
RJC Offshore	5	2	2	2	2	2
Aberdeen Service Co.	6	6	5	5	6	5
OIS Group	7	7	6	6	5	6
Star Offshore Services	8	8	8	7	7	7
Britoil (Development)	9	9	7	8	8	8

The *oil services* industry is a difficult industry to resolve with the demise of *the Lyle Offshore Group*. There is no dominant firm in the industry but the likelihood of a dominant oligopoly of some description remains high.

Slaughterers	1983	1984	1985	1986	1987	1988
British Beef Co.	1	1	1	1	1	1
David A. Hall	2	3	2	3	3	5
Euroscot Meats	3	4	3	2	2	4
J.W. Galloway	4	6	5	4	6	7
W. Forrest & Son	5	2	7	10	10	11
Scotbeef	6	7	6	6	7	6
McIntosh Donald	7	5	4	5	5	2
J. McIntosh & Co.	8	8	8	7	4	3
McKellar Watt	9	9	9	9	8	8
Campbells' Prime Meat	10	10	10	8	9	9
Sandyford Foods	11	11	14	15	17	16

The market share of the leading firm in the *Scottish Slaughtering industry*, the *British Beef Company* varies between *30* per cent in *1988* to *39.5* per cent in *1987*. The company then although failing to achieve the status of dominant firm in the industry remains in a very powerful position. Against this, there is no means of identifying a dominant oligopoly of firms, as the firm market share turbulence in meat processing is fairly extensive. For example, *McIntosh Donald* and *J. McIntosh & Company* rapidly ascend the market share positions, suggestive of competition between all industry incumbents.

Steel Merchants	1983	1984	1985	1986	1987	1988
Murray International Metals	1	1	1	1	1	2
Steel Stockholdings	2	2	2	2	2	1*
Martins	3	3	3	3	4	3
Syndicated Steel	4	4	4	4	3	-
Barclay & Mathieson	5	5	5	5	5	4
Multi-Metals	6	6	6	6	6	7
J. Smith & Co.	7	8	8	8	8	6
Glegg & Thomson	8	9	9	9	9	8
Glen Metals	9	10	10	10	10	9
Christie & Son	10	7	7	7	7	5

Firm market share turbulence (1983-88) in the steel merchanting industry provides some evidence of a dominant duopoly. Indeed, in *1988*, *Murray International Metals* and the reformed *Steel Stockholdings Group* had a combined market share of 59.4 per cent.

Textile Manufacture	1983	1984	1985	1986	1987	1988
William Baird PLC	1	1	2	2	2	2
Dawson International PLC	2	2	1	1	1	1
Don Brothers, Buist PLC	3	4	3	3	4	3
Lamont Holdings	4	3	4	4	3	4
William Haley & Sons	5	5	5	5	5	10
Scottish, English & European Textiles PLC	6	6	6	6	6	5

The *textile manufacturing* industry in Scotland is dominated by two firms, *William Baird PLC* and *Dawson International PLC*. Evidence of a dominant oligopoly is also present, but a combined market share of *71.2* per cent in *1984* for the duopolists is very significant.

Timber Merchants	1983	1984	1985	1986	1987	1988
Brownlee PLC	1	1	1	1	1	1
J. Fleming & Co.	2	2	2	2	2	2
A. & R. Brownlie	3	3	3	3	3	4
Velux Co.	4	4	4	4	4	3
J. Jones & Sons	5	6	5	5	5	6
Walker Timber	6	8	8	8	10	12
Robinson Dunn & Co.	7	7	6	9	6	7
J. Donaldson & Son	8	10	9	6	8	10
Elgin City Sawmills	9	9	10	11	9	9
Hay & Co.	10	14	12	14	14	14
A. Wilson & Sons	11	12	16	13	11	11
Bell & Sime	12	15	13	16	16	15
J. Woyka & Co.	13	11	11	10	12	13
W. Lang	14	13	14	12	13	5*
Montague L. Meyer	15	5	7	7	7	8

In *1983, Brownlee PLC*'s market share of the timber merchanting industry was equal to *15.2* per cent ruling out dominant firm status. However there is evidence of a dominant oligopoly composed of the four leading firms for the period *1983-88*. No firms from the 'fringe' penetrates their market share position. Any firm market share turbulence that does take place is not particularly extensive, with *W. Lang*'s success in *1988* a result of merger.

Vehicle Distribution	1983	1984	1985	1986	1987	1988
Sears Motor Group	1	1	1	1	1	1
The S.M.T. Sales & Service Co.	2	2	2	2	2	2
Laidlaw	3	3	3	3	3	4
Alexander Holdings PLC	4	4	4	5	5	5
Taggarts	5	5	5	7	7	6
John Martin Holdings	6	6	6	6	6	7
Arnold Clark Autos.	7	8	8	4	4	3
The Town & County Motor Garage	8	7	7	9	9	27
Mogil Motors	9	20	22	26	24	25
Ian Skelly	10	11	12	12	15	18
Wylie's	11	10	14	13	10	9
Cochranes Garages	12	13	9	24	25	26
Cordiners Garage	13	9	11	15	18	13
Eastern Motor Co.	14	12	10	10	8	8
Trust Motors	15	14	15	11	16	24

There is no evidence of a dominant firm or oligopoly in the *vehicle distribution* industry. Excepting the possibility of a dominant duopoly between *Sears Motor Group* and *S.M.T.*, the extent of market share firm turnover does suggest a strong fringe in the industry. It follows that the dominant conduct within the industry is likely to be competition between all incumbents.

Whisky Distilling	**1983**	**1984**	**1985**	**1986**	**1987**	**1988**
The Distillers Co. PLC	1	1	1	1	1	1
A. Bell & Sons	2	3	3	3	2	3
Seagram Distillers	3	4	2	2	3	2
Amalgamated Distilled Products PLC	4	2	4	4	4	4
W. M. Teacher & Sons	5	6	7	8	9	15
Hiram Walker & Sons	6	5	5	6	6	12
Chivas Brothers	7	8	6	5	5	5
Whyte & MacKay Distillers	8	7	10	10	8	8
The Highland Distilleries	9	9	8	7	7	6
Matthew Gloag & Son	10	10	9	9	10	7
White Horse Distilleries	11	13	16	17	15	14
J. Dewar & Sons	12	11	11	11	11	9
J. Haig & Co.	13	15	17	18	16	17
James Burrough Distilleries	14	12	12	13	12	10

In the *whisky distilling* industry, the *Distillery Company PLC* in *1988* had a *39.8* per cent market share, dominant firm status. As a complement to this conclusion, in terms of the market share turnover of firms, the leading four whisky distilling oligopolies also appear to be dominant for the period *1983-88*, with a combined market share of *69.3* per cent in *1988*.

6.4 Clues to the Presence of Indigenous Industry Conduct

Table *6-2* summarises the findings of using firm market share turbulence as a proxy for dynamic interaction between incumbent firms. The presence of indigenous industry conduct may be revealed by identifying anomalies between the conduct regime (as defined by firm market share turbulence), the 'structural endowment' and the profit rate for the industry. The *3*-firm concentration ratio (1983-88) provides an indication of the 'structural endowment' for each industry.

Table 6-2 : The Conduct Regime (identified using firm market share turbulence), the 3-firm Concentration Ratio (1983-88) and the industry Profit-Sales Ratio (1983-88) for each industry compared.

Industry Type	Conduct Type	CR3	PROFIT
Electronic Components	Dominant Firm	89.30	6.26
Industrial Valve Prodn.	Dominant Firm	72.10	8.56
Industrial Rubber Prodn.	Dominant Firm	85.12	4.82
Plant Hire	Dominant Firm	60.69	4.91
Mean		**76.80**	**6.14**

Industry Type	Conduct Type	CR3	PROFIT
Builders' Merchants	Dominant Oligopoly of *7* Firms	53.20	3.45
Knitwear Manufacture	Dominant Oligopoly of *3* Firms	47.71	6.81
Paper Manufacture	Dominant Duopoly	56.52	7.46
Oil Services	Dominant Oligopoly	63.86	3.82
Steel Merchants	Dominant Duopoly	63.63	4.37
Textile Manufacture	Dominant Duopoly	81.91	8.69
Timber Merchants	Dominant Oligopoly of *4* Firms	34.44	3.82
Whisky Distilling	Dominant Oligopoly of *4* Firms	56.76	13.66
Mean		**57.25**	**6.51**

Industry Type	Conduct Type	CR3	PROFIT
Building Contractors	Competition	36.04	3.01
Petroleum Distribution	Competition	45.37	1.47
Slaughterers	Competition	53.87	0.42
Vehicle Distribution	Competition	36.10	1.45
Mean		**42.85**	**1.59**

It is a very interesting that the four industries identified as competitive (by firm market share turbulence) also have the lowest mean *3*-firm concentration ratio and profit rate. This is some vindication of the empirical methodology in this chapter.

There are a number of anomalies that suggest the presence of indigenous competition; that is, competition which is not some function of market structure. For example, the meat processing (or slaughtering) industry has a mean concentration ratio and profit rate of *53.87* and *0.42* respectively. Compare this with the builders' merchanting industry which has an identical mean concentration ratio but a mean profit rate of *3.45*. The presence of a dominant oligopoly in the latter industry may be a contributing factor in significantly greater mean profit rates in builders' merchanting opposed to meat processing.

Remaining with dominant oligopolies, the very high rates of profit in the whisky distilling industry in Scotland has been without explanation up to this point in the thesis. Given that no structural explanation can be found for such high profits, it is possible that the dominant oligopoly has been particularly successful in increasing profit margins and supplanting competition with price leadership. Similar arguments can be made for a variety of pair-wise industry comparisons. The important conclusion is that an equally plausible explanation can be made for profit differentials between industries based on indigenous industry conduct as would be the case using the *3*-firm concentration ratio.

In table *6-3*, a comparison is made between the indigenous conduct regimes and the set of net industry-specific effects in profit.

Table 6-3 : The Conduct Regime (identified using firm market share firm turbulence) and the Set of Net Industry-Specific Effects in Profit for each industry compared

Industry Type	Conduct Type	NISEs
Electronic Components	Dominant Firm	-5.740
Industrial Valve Prodn.	Dominant Firm	0.086
Industrial Rubber Prodn.	Dominant Firm	-5.914
Plant Hire	Dominant Firm	-0.792
Mean		**-3.09**

Industry Type	Conduct Type	NISEs
Builders' Merchants	Dominant Oligopoly of *7* Firms	-0.758
Knitwear Manufacture	Dominant Oligopoly of *3* Firms	2.539
Paper Manufacture	Dominant Duopoly	3.049
Oil Services	Dominant Oligopoly of Firms	-3.359
Steel Merchants	Dominant Duopoly	-1.409
Textile Manufacture	Dominant Duopoly	-1.261
Timber Merchants	Dominant Oligopoly of *4* Firms	2.652
Whisky Distilling	Dominant Oligopoly of *4* Firms	10.176
Mean		**1.454**

Industry Type	Conduct Type	NISEs
Building Contractors	Competition	1.117
Petroleum Distribution	Competition	1.845
Slaughterers	Competition	-3.676
Vehicle Distribution	Competition	1.450
Mean		**0.184**

The 'a priori' expectation is that where the degree of competition in an industry is limited through some form of strategic domination, the net industry-specific effect in profit is ceteris paribus greater.

This is true for any comparison between the set of dominant oligopolised industries and those which are competitive. The latter set has a mean net industry-specific effect equal to *0.184*, while the mean net industry-specific effect for the dominant oligopolies is *1.454*. However, those industries which have been identified as dominated by a single firm have a mean net industry-specific effect equal to *-3.09*. This discrepancy is typical of the idiosyncratic nature of the set of net industry-specific effects. The distribution of net industry-specific effects does not lend itself easily to explanation by a single underlying factor.

Chapter 7 Conclusion and Main Findings

The main research findings in this thesis are :-

1. **The isolation of meaningful linkages between the set of industry-specific effects and a series of underlying factors (determinants). The existing frontier of research into the nature of industry-specific effects in profit has been to refer to these effects as 'idiosyncratic'. This implies that any underlying factors - that determine the distribution of industry-specific effects - are beyond the reach of sensible analysis. This thesis has shown this not to be the case.**

2. **The construction of an alternative paradigm of profit based on a recognition of the role of industry- and time-specific effects.**

7.1 Industry-Specific Effects

The set of industry-specific effects (ISEs) reflect the combination of a number of underlying factors, which this research thesis has successfully identified as :-

- **Labour Costs (the wage bill),**
- **Income Gearing (a proxy for long-term borrowing),**
- **Spatial Distribution of Firms (measured by the Geographical Concentration Index),**
- **Indigenous Industry Conduct (measured by firm market share turbulence).**

In addition a number of other factors were tested for links to the distribution of industry-specific effects. This thesis was unable to establish any significant correlations between the following factors and the set of industry-specific effects :-

- **The Business Cycle.**

Although a statistically significant set of industry-per-time-period effects were estimated, attempts at matching these parameter estimates to theories of the business cycle proved unsuccessful. Nevertheless, it is the conclusion of this thesis that the business cycle 'plays' a significant role in determining the distribution of industry-specific effects.

- **Accounting Data.**

1. Capital Costs,
2. Fixed Assets per Employee (a proxy for the capital-labour ratio),
3. Current Ratio,
4. Borrowing Ratio,
5. Export Ratio.

However, the thesis was able to establish statistically significant correlations between net industry-per-time-period effects and :-

1. **Fixed Assets per Employee,**
2. **Current Ratio,**
3. **Export Ratio.**

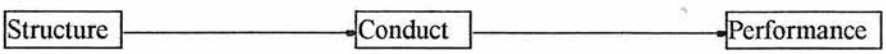
It is therefore the conclusion of this thesis that the 'idiosyncratic parameters' represent the combined influence of the following underlying factors :-

- **Labour Costs,**
- **Indigenous Industry Conduct,**
- **Spatial Distribution of Firms,**
- **The Business Cycle,**
- **Income Gearing,**
- **Fixed Assets per Employee,**
- **Current Ratio,**
- **Export Ratio.**

7.2 A Revised Paradigm

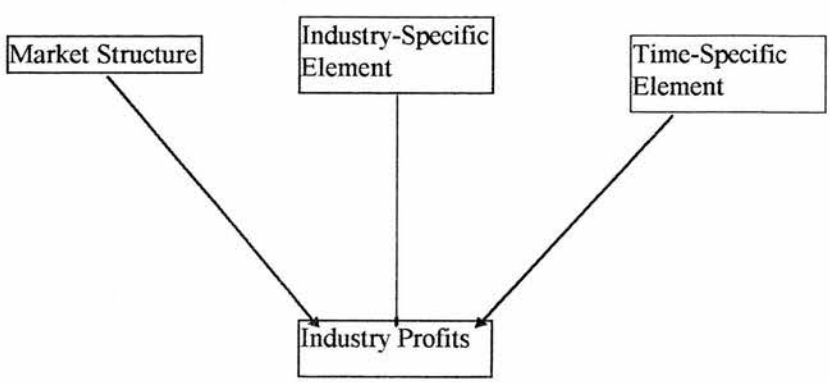
The *Structure-Conduct-Performance Paradigm* (figure *7-1*) presumed that market structure, by conditioning industry conduct, is the singular factor in determining the profit rate.

Figure 7-1: Schematic of the SCP Paradigm



The thesis has shown that distortions caused by the presence of *industry-specific effects* ensures that any relationship between the 'traditional' elements of market structure and firm performance is econometrically 'weak'. The following revised paradigm of industry profit reflects the contribution of industry- and time-specific effects :-

Figure 7-2 : Schematic of a Revised Paradigm.



In algebraic terms, this alternative paradigm may be written as :-

$$\Pi_{MS} + \Pi_{ISE} + \Pi_{TSE} = \Pi_{TOT}, \qquad \text{Eqn. (7.1)}$$

where,

Π_{MS} = profits accruing from market structure,

Π_{ISE} = profits accruing from the industry-specific element of industry profits,

Π_{TSE} = profits accruing from the time-specific element of industry profits.

It also follows that :-

$$\frac{\Pi_{MS}}{\Pi_{TOT}} + \frac{\Pi_{ISE}}{\Pi_{TOT}} + \frac{\Pi_{TSE}}{\Pi_{TOT}} = 1 \ . \qquad \text{Eqn. (7.2)}$$

In this thesis, it has been shown that the following condition holds :-

$$\frac{\Pi_{ISE}}{\Pi_{TOT}} + \frac{\Pi_{TSE}}{\Pi_{TOT}} > \frac{\Pi_{MS}}{\Pi_{TOT}} \ , \qquad \text{Eqn. (7.3)}$$

which states that **the profit contribution from the set of industry and time-specific effects is greater than from 'traditional' elements of market structure**. This is the final result for this thesis and emphasises the requirement for a greater emphasis to be placed on the role of industry- and time-specific effects in the determination of industry profit.

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AREA CODES - GEOGRAPHICAL LOCATION OF FIRMS

DISTRICT	CODE
HIGHLANDS	HLAND
ABERDEENSHIRE	ABD
ARGYLL & BUTE	AGY & BT
PERTH & KINROSS	PTH & KIN
FIFE	FIFE
STIRLING	STIR
LOTHIAN	LTH
BORDERS	BDS
DUMFRIES & GALLOWAY	DMF & GAL
AYRSHIRE	AYR
GLASGOW	GW
LANARKSHIRE	LNK
FALKIRK	FLK
MORAYSHIRE	MORAY
ANGUS	ANGUS

notes : Glasgow (GW) encompasses Inverclyde, Renfrewshire, East Renfrewshire, Dunbarton & Clydebank and East Dunbartonshire.

APPENDIX 1

Industry Data (1983-88)

Contents :

- Profit-Sales Ratio
- 3-Firm Concentration Ratio
- 5-Firm Concentration Ratio
- Herfindahl Index
- Advertising Sales Ratio
- Minimum Efficient Firm Size (MEFS)
- Import-Sales Ratio
- Annual Sales Growth
- Average Revenue Product (ARP)

PROFIT-SALES RATIOS (%)

Industry	1983	1984	1985	1986	1987	1988
Building Contractors	4.62	4.6	2.87	2.62	1.56	1.77
Builders' Merchants	4.06	3.74	3.77	3.46	2.89	2.75
Electronic Components Manufacture	8.38	8.71	6.35	5.28	4.51	4.33
General Haulage	2.57	3.01	3.35	2.68	3.42	3.9
Industrial Rubber Manufacture	5.1	3.79	3.19	3.66	6.97	6.22
Industrial Valves Manufacture	8.87	4.37	5.09	12.27	9.86	10.88
Knitwear Manufacture	5.46	6.53	7.5	6.88	6.93	7.54
Oil Services	7.68	2.57	4.91	0.62	2.19	4.97
Paper Manufacture	5.65	7.88	7.75	7.52	8.39	7.59
Petroleum Distribution	1.33	1.32	1.52	1.11	1.78	1.73
Plant Hire	2.45	4.35	5.81	5.15	5.57	6.14
Slaughterers & Meat Processors	-0.27	0.13	0.51	0.58	0.67	0.92
Steel Merchants	3.17	4.43	4.6	3.44	2.77	7.78
Textile Manufacture	7.71	8.27	8.95	9.16	9.01	9.02
Timber Merchants	4.62	5.82	3.65	2.32	2.71	3.8
Vehicle Distribution	1.21	1.2	1.4	1.4	1.63	1.83
Whisky Distilling	12.99	13.14	13.41	13.66	13.92	14.83
Cross-Industry Average	**5.04**	**4.93**	**4.98**	**4.81**	**4.99**	**5.65**

3-FIRM CONCENTRATION RATIO

Industry	1983	1984	1985	1986	1987	1988
Building Contractors	33.52	34.89	37.47	39.91	37.78	32.68
Builders' Merchants	58.85	49.37	49.68	48.66	55.96	56.68
Electronic Components Manufacture	90.12	87.2	87.84	90.75	90.44	89.43
General Haulage	32.54	25.45	27.66	27.7	33.4	34.11
Industrial Rubber Manufacture	77.02	86.4	86.88	86.8	87.86	85.77
Industrial Valves Manufacture	63.45	66.17	69.2	79.23	76.69	77.84
Knitwear Manufacture	35.36	48.73	47.75	51.69	53.67	49.03
Oil Services	60.25	57.69	63.19	64.53	69.34	68.17
Paper Manufacture	68.72	58.93	58.93	49.1	52.88	50.58
Petroleum Distribution	46.38	38.43	39.7	42.73	50.93	54.02
Plant Hire	61.74	60.52	60.6	59.52	61.55	60.22
Slaughterers & Meat Processors	51.61	54.15	52.56	55.22	54.38	55.27
Steel Merchants	58.15	61.75	64.01	59.64	63.91	74.34
Textile Manufacture	85.93	78.63	80.64	80.8	81.53	83.92
Timber Merchants	35.6	36.69	36.84	36.29	32.22	28.97
Vehicle Distribution	38.4	37.41	37.43	34.77	35.31	33.26
Whisky Distilling	61.78	52.46	54.35	55.16	56.21	60.57
Cross-Industry Average	**56.44**	**54.99**	**56.16**	**56.62**	**58.47**	**58.52**

5-FIRM CONCENTRATION RATIO

Industry	1983	1984	1985	1986	1987	1988
Building Contractors	42.45	44.41	46.04	47.92	48.74	43.4
Builders' Merchants	65.11	65.51	64.84	64.99	71.02	71.72
Electronic Components Manufacture	93.07	91.85	92.15	94.59	94.46	94.19
General Haulage	39.29	36.88	38.88	39.15	43.29	44.33
Industrial Rubber Manufacture	96.9	95.97	96.92	97.32	97.31	97.08
Industrial Valves Manufacture	87.81	87.01	87.09	93.19	91.61	92.1
Knitwear Manufacture	63.13	59.35	58.6	63.19	63.69	60.66
Oil Services	79.55	81.65	86.78	85.95	87.98	88.21
Paper Manufacture	74.79	74.8	74.36	68.31	72.27	70.74
Petroleum Distribution	59.69	58.04	57.17	61.09	68.07	69.39
Plant Hire	67.09	68.36	68.33	67.67	69.45	69
Slaughterers & Meat Processors	64.2	67.37	65.89	68.34	67.61	69.75
Steel Merchants	80.06	83.13	84.78	83.33	85.88	89.21
Textile Manufacture	91.21	91.06	91.55	91.62	92.4	93.53
Timber Merchants	46.57	47.15	47.87	48.49	46.18	43.25
Vehicle Distribution	45.8	46.63	46.97	45.3	46.28	45.37
Whisky Distilling	63.79	63.49	66.29	67.04	68.68	73.29
Cross-Industry Average	**68.27**	**68.39**	**69.09**	**69.85**	**71.47**	**71.48**

HERFINDAHL INDEX

Industry	1983	1984	1985	1987	1988
Building Contractors	0.0620	0.0668	0.0791	0.0803	0.0540
Builders' Merchants	0.1224	0.1257	0.1308	0.1770	0.1731
Electronic Components Manufacture	0.5143	0.4944	0.4322	0.4830	0.4330
General Haulage	0.0450	0.0436	0.0463	0.0623	0.0614
Industrial Rubber Manufacture	0.5015	0.5149	0.5352	0.5723	0.5076
Industrial Valves Manufacture	0.2304	0.1874	0.1932	0.2509	0.2782
Knitwear Manufacture	0.0997	0.0961	0.0935	0.1123	0.0975
Oil Services	0.1471	0.1506	0.1726	0.1963	0.2169
Paper Manufacture	0.1712	0.1641	0.1657	0.1352	0.1293
Petroleum Distribution	0.0941	0.0915	0.0919	0.1346	0.1440
Plant Hire	0.2206	0.2283	0.2435	0.2384	0.2351
Slaughterers & Meat Processors	0.1551	0.1737	0.1634	0.1993	0.1421
Steel Merchants	0.1476	0.1685	0.1747	0.1768	0.2188
Textile Manufacture	0.2823	0.2703	0.2816	0.2912	0.3078
Timber Merchants	0.0661	0.0688	0.0680	0.0615	0.0587
Vehicle Distribution	0.0643	0.0688	0.0688	0.0633	0.0615
Whisky Distilling	0.1721	0.1626	0.1678	0.1722	0.1936
Cross-Industry Average	**0.1821**	**0.1809**	**0.1828**	**0.2004**	**0.1949**

ADVERTISING-SALES RATIOS (%)

Industry	1984	1985	1986	1987	1988
Building Contractors	0.145	0.145	0.153	0.122	0.148
Builders' Merchants	N/A	0.559	0.617	0.773	0.502
Electronic Components Manufacture	0.000	0.000	0.000	0.000	0.000
General Haulage	0.092	0.091	0.044	0.078	0.143
Industrial Rubber Manufacture	0.014	0.032	0.015	0.017	0.009
Industrial Valves Manufacture	0.066	0.071	0.094	0.094	0.082
Knitwear Manufacture	0.007	0.006	0.001	0.002	0.002
Oil Services	N/A	0.358	0.940	4.340	3.990
Paper Manufacture	0.000	0.000	0.000	0.000	0.000
Petroleum Distribution	1.220	0.540	1.030	4.635	4.094
Plant Hire	0.842	0.835	0.898	0.683	0.755
Slaughterers & Meat Processors	0.421	0.578	0.619	0.642	0.331
Steel Merchants	0.000	0.000	0.000	0.000	0.000
Textile Manufacture	0.000	0.000	0.000	0.000	0.000
Timber Merchants	0.224	0.333	0.114	0.176	0.088
Vehicle Distribution	1.420	1.010	1.760	0.920	1.210
Whisky Distilling	0.555	0.602	0.458	0.727	0.422
Cross-Industry Average	**0.334**	**0.304**	**0.397**	**0.777**	**0.693**

notes : N/A - not available

MINIMUM-EFFICIENT FIRM SIZE (% OF INDUSTRY)

Industry	1983/84	1984/85	1985/86	1986/87	1987/88
Building Contractors	0.57	0.47	0.54	0.62	0.58
Builders' Merchants	0.62	0.51	0.60	0.82	0.51
Electronic Components Manufacture	0.48	0.64	0.16	0.45	0.51
General Haulage	0.55	0.28	0.77	0.32	0.46
Industrial Rubber Manufacture	4.85	12.25	6.54	4.31	4.25
Industrial Valves Manufacture	5.14	2.60	8.20	3.17	7.97
Knitwear Manufacture	1.22	0.80	1.72	0.60	0.45
Oil Services	6.40	2.54	4.69	1.86	2.03
Paper Manufacture	4.58	2.35	2.64	7.36	2.87
Petroleum Distribution	4.50	8.33	7.27	4.91	6.49
Plant Hire	1.09	0.66	0.77	0.77	0.83
Slaughterers & Meat Processors	1.44	1.64	1.69	2.27	1.60
Steel Merchants	4.95	4.59	4.67	4.51	4.92
Textile Manufacture	0.56	0.49	0.49	0.59	0.54
Timber Merchants	3.05	2.31	1.38	1.51	2.82
Vehicle Distribution	0.59	0.72	0.81	0.86	0.41
Whisky Distilling	0.92	0.96	1.28	0.99	0.94
Cross-Industry Average	**2.44**	**2.48**	**2.60**	**2.11**	**2.25**

IMPORT-SALES RATIOS

Industry	1983	1984	1985	1986	1987	1988
Building Contractors	0.21	0.18	0.15	0.14	0.16	0.17
Builders' Merchants	0.76	0.63	0.60	0.58	0.55	0.58
Electronic Components Manufacture	0.34	0.37	0.24	0.21	0.27	0.35
General Haulage	N.APP	N.APP	N.APP	N.APP	N.APP	N.APP
Industrial Rubber Manufacture	0.44	0.59	0.58	0.37	0.32	0.35
Industrial Valves Manufacture	0.32	0.50	0.51	0.45	0.58	0.91
Knitwear Manufacture	0.28	0.32	0.30	0.16	0.16	0.18
Oil Services	1.15	1.98	1.38	0.77	0.50	0.12
Paper Manufacture	0.24	0.21	0.20	0.22	0.22	0.22
Petroleum Distribution	1.99	3.91	2.08	0.84	0.53	0.12
Plant Hire	1.12	0.98	0.89	0.84	0.91	0.89
Slaughterers & Meat Processors	0.54	0.46	0.40	0.46	0.41	0.40
Steel Merchants	1.66	2.36	1.52	1.33	1.06	1.32
Textile Manufacture	0.10	0.11	0.09	0.05	0.05	0.05
Timber Merchants	0.30	0.23	0.20	0.20	0.19	0.18
Vehicle Distribution	0.04	0.15	0.05	0.17	0.23	0.48
Whisky Distilling	0.005	0.004	0.003	0.003	0.003	0.004
Cross-Industry Average	**0.593**	**0.812**	**0.575**	**0.425**	**0.384**	**0.395**

ANNUAL SALES GROWTH (%)

Industry	1984	1985	1986	1987	1988
Building Contractors	10.5	12.6	5.3	5.4	4.5
Builders' Merchants	13.1	2.9	0.8	25.6	5.9
Electronic Components Manufacture	22.0	44.3	-0.1	9.4	-1.6
General Haulage	9.7	15.0	4.3	9.6	15.0
Industrial Rubber Manufacture	0.8	11.2	-4.9	15.5	4.7
Industrial Valves Manufacture	-10.1	20.4	-1.6	-7.5	9.1
Knitwear Manufacture	18.6	17.0	18.2	-2.9	-0.9
Oil Services	15.7	-17.7	-25.3	5.9	2.4
Paper Manufacture	17.8	11.4	-4.8	23.3	6.2
Petroleum Distribution	1.5	7.5	3.3	8.1	6.6
Plant Hire	6.6	7.5	3.5	10.5	14.6
Slaughterers & Meat Processors	11.9	4.0	1.3	19.7	10.2
Steel Merchants	34.5	21.0	-17.4	18.8	1.3
Textile Manufacture	22.4	26.2	8.2	8.7	1.0
Timber Merchants	20.0	5.9	6.8	6.5	16.9
Vehicle Distribution	7.1	7.0	9.9	13.6	10.5
Whisky Distilling	4.5	11.5	5.8	4.4	12.6
Cross-Industry Average	**12.15**	**12.22**	**0.78**	**10.27**	**7.00**

AVERAGE REVENUE PRODUCT

Industry	1983	1984	1985	1986	1987	1988
Building Contractors	37	39.6	45.2	48.2	50.1	56.6
Builders' Merchants	63.5	65.2	66.9	65.7	75.6	79.4
Electronic Components Manufacture	23.9	27.1	36.1	35.9	37.1	39.1
General Haulage	28.4	29.8	33.5	33.2	37.6	40.4
Industrial Rubber Manufacture	41.8	46.6	54.1	48.5	53.2	55.9
Industrial Valves Manufacture	41.5	36.8	43.4	51.3	48.3	49.4
Knitwear Manufacture	20.3	22.8	25	29.6	29.8	28.2
Oil Services	34.8	39.8	39.2	36.6	40.6	42.9
Paper Manufacture	38.6	46	50.4	49.6	59.9	63.1
Petroleum Distribution	207.2	219.2	239.1	222.6	244	264.2
Plant Hire	34.5	38.2	40.3	40.4	42.9	47.2
Slaughterers & Meat Processors	68.9	76.3	75.9	75.1	84.2	94.5
Steel Merchants	88.9	117.5	132	110.7	127.3	124
Textile Manufacture	21	23.8	26.5	27.4	28.6	28.7
Timber Merchants	47.3	52.8	55.3	58.6	64	74.8
Vehicle Distribution	93.6	97.9	104.6	107.9	119.7	128.1
Whisky Distilling	78	94.6	109.6	116.3	125.2	134.1
Cross-Industry Average	**57.01**	**63.18**	**69.24**	**68.09**	**74.59**	**79.45**

APPENDIX 2 : Building Contractors

Firm Data (1983-88)

Contents :

- Profit
- Turnover
- Profit-Sales Ratio (PSR %)
- Annual Sales Growth (Sales %)
- Number of Employees (Emp.)
- Average Revenue Product (ARP)
- Location Code
- Wage Bill
- Input-Output Ratio for Labour
- Capital Employed
- Input Output Ratio for Capital
- Input Output Ratio (Total)
- Fixed Assets (Fx. Ass.)
- Fixed Assets per Employee (FA/L)
- Current Assets
- Current Liabilities
- Current Ratio (CR)
- Borrowing Ratio (Borrow)
- Income Gearing (Inc. Gr.)
- Export Ratio (XR)

BUILDING CONTRACTORS (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
Aberdeen Construction PLC	5236	88034	5.948	2922	30.128
B. & J. Aitken	155	5098	3.040	126	40.460
W. & J. Barr & Sons	765	12544	6.099	248	50.581
Barratt	7700	61895	12.440	1178	52.542
Bett Brothers	377	20045	1.881	966	20.751
Henry Boot Scotland	2	11369	0.018	201	56.562
G.S. Brown (Construction)	1069	4125	25.915	35	117.857
W.H. Brown (Construction)	215	7824	2.748	180	43.467
A.B. Cant	33	2356	1.401	71	33.183
Chap (Holdings)	1	6847	0.015	245	27.947
Christie & Co. (Contractors)	-36	2366	-1.522	111	21.315
Cala PLC	1345	18135	7.417	147	123.367
Clachan (Construction)	92	9858	0.933	177	55.695
J. Cochrane & Co.	37	2162	1.711	90	24.022
D.H. Crighton (Contractors)	119	3463	3.436	140	24.736
Cruden Building	665	15914	4.179	518	30.722
Dallfied Construction	73	3864	1.889	136	28.412
J. Dennis & Co.	46	1203	3.824	63	19.095
J. Dickie & Son	73	2931	2.491	65	45.092
Doric (Construction) Co.	326	11432	2.852	472	24.220
Drake & Scull (Scotland)	180	14750	1.220	526	28.042
Fairclough Scotland	1265	25333	4.993	619	40.926
A. Farquhar	1052	12713	8.275	310	41.010
Firholm	137	9970	1.374	249	40.040
Forth Valley (Construction)	-19	2078	-0.914	75	27.707
Front Line (Construction)	-52	1421	-3.659	60	23.683
G.A. Group	942	30404	3.098	606	50.172
Charles Grey Builders	873	36382	2.400	1400	25.987
Hart Builders	1188	11034	10.767	520	21.219
Hunter (Construction)	-12	3567	-0.336	146	24.432
Lafferty Construction	584	16641	3.509	949	17.535
J. Lawrence	252	38126	0.661	804	47.420
Lawrence (Construction) Co.	230	14346	1.603	306	46.882
Leech Homes (Scotland)	514	7561	6.798	127	59.535
George Leslie	34	5708	0.596	177	32.249
F.J.C. Lilley PLC	11029	196663	5.608	4865	40.424
London & Clydeside Est.	1627	7997	20.345	83	96.349
Luddon Construction	166	7407	2.241	243	30.481
M.D.W. Holdings PLC	1969	45509	4.327	743	61.250
John McColl Wells	-64	1203	-5.320	88	13.670
John G. McGregor	753	7065	10.658	252	28.036
R.J. McLeod	88	17199	0.512	421	40.853
Hugh MacRae & Co.	320	9652	3.315	298	32.389
MacTaggart & Mickel	1120	6451	17.362	389	16.584
Melville, Dundas & Whitson	1456	34551	4.214	532	64.945
Industry Sub-Totals	43925	855196		22879	

Miller (Construction)	531	16818	3.157	597	28.171
Morrison Construction	-2058	10793	-19.068	270	39.974
Mowlem (Scotland)	168	3194	5.260	86	37.140
Murdich MacKenzie	-518	11291	-4.588	245	46.086
Norwest Holst Scotland	551	15333	3.594	198	77.439
Robinson & Davidson	693	10375	6.680	573	18.106
Salveson Homes (Scotland)	557	13070	4.262	158	82.722
J. Smart & Co.	829	17761	4.668	512	34.689
W. & J.R. Watson	8	11420	0.070	480	23.792
Whatlings PLC	271	24545	1.104	592	41.461
George Wilson	229	8331	2.749	386	21.583
Stewart Milne (Const.)	1557	9949	15.650	285	34.909
Muir Construction	116	5378	2.157	145	37.090
Industry Totals	46859	1013454	4.624	27406	36.979

BUILDING CONTRACTORS (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Construction PLC	ABD	20058	0.228	40730	0.463	0.691	37809
B. & J. Aitken	GW	955	0.187	1237	0.243	0.430	1112
W. & J. Barr & Sons	AYR	2486	0.198	3593	0.286	0.485	3442
Barratt	ABD	4001	0.065	1735	0.028	0.093	308
Bett Brothers	PTH & KIN	5997	0.299	17248	0.860	1.160	14163
Henry Boot Scotland	GW	1455	0.128	139	0.012	0.140	243
G.S. Brown (Construction)	PTH & KIN	178	0.043	3631	0.880	0.923	704
W.H. Brown (Construction)	PTH & KIN	1276	0.163	376	0.048	0.211	222
A.B. Cant	FIFE	484	0.205	359	0.152	0.358	322
Chap (Holdings)	ABD	1746	0.255	717	0.105	0.360	567
Christie & Co. (Contractors)	FIFE	735	0.311	216	0.091	0.402	197
Cala PLC	LTH	1287	0.071	9691	0.534	0.605	2716
Clachan (Construction)	GW	1060	0.108	801	0.081	0.189	450
J. Cochrane & Co.	GW	645	0.298	277	0.128	0.426	127
D.H. Crighton (Contractors)	LTH	-	-	295	0.085	-	737
Cruden Building	GW	3924	0.247	1149	0.072	0.319	360
Dallfied Construction	GW	1031	0.267	237	0.061	0.328	140
J. Dennis & Co.	STIR	338	0.281	293	0.244	0.525	161
J. Dickie & Son	GW	507	0.173	440	0.150	0.323	247
Doric (Construction) Co.	ABD	3294	0.288	2205	0.193	0.481	1084
Drake & Scull (Scotland)	GW	3981	0.270	2239	0.152	0.422	206
Fairclough Scotland	GW	4662	0.184	1000	0.039	0.224	3770
A. Farquhar	ABD	1963	0.154	3494	0.275	0.429	2048
Firholm	LNK	1956	0.196	780	0.078	0.274	264
Forth Valley (Construction)	STIR	529	0.255	199	0.096	0.350	15
Front Line (Construction)	GW	420	0.296	86	0.061	0.356	117
G.A. Group	GW	5246	0.173	4818	0.158	0.331	2047
Charles Grey Builders	PTH & KIN	9859	0.271	6034	0.166	0.437	4311
Hart Builders	LTH	3647	0.331	3711	0.336	0.667	1461
Hunter (Construction)	ABD	962	0.270	1272	0.357	0.626	749
Lafferty Construction	GW	7065	0.425	2938	0.177	0.601	2580
J. Lawrence	GW	6141	0.161	20441	0.536	0.697	19543
Lawrence (Construction) Co.	GW	2779	0.194	586	0.041	0.235	16
Leech Homes (Scotland)	FLK	875	0.116	2941	0.389	0.505	209
George Leslie	GW	1327	0.232	674	0.118	0.351	382
F.J.C. Lilley PLC	GW	42709	0.217	60405	0.307	0.524	38097
London & Clydeside Est.	GW	412	0.052	2545	0.318	0.370	259
Luddon Construction	GW	1994	0.269	1087	0.147	0.416	1635
M.D.W. Holdings PLC	GW	5140	0.113	10808	0.237	0.350	4699
John McColl Wells	DMF & GAL	511	0.425	141	0.117	0.542	126
John G. McGregor	HLAND	3097	0.438	1778	0.252	0.690	546
R.J. McLeod	GW	3610	0.210	2792	0.162	0.372	2195
Hugh MacRae & Co.	HLAND	2250	0.233	3029	0.314	0.547	1997
MacTaggart & Mickel	GW	2461	0.381	18515	2.870	3.252	2056
Melville, Dundas & Whitson	GW	3598	0.104	4121	0.119	0.223	2411
Industry Sub-Totals		168651		241803			156850

Miller (Construction)	LTH	4722	0.281	5760	0.342	0.623	86
Morrison Construction	HLAND	1961	0.182	298	0.028	0.209	20
Mowlem (Scotland)	GW	-	-	358	0.112	-	7
Murdich MacKenzie	LNK	1977	0.175	1807	0.160	0.335	774
Norwest Holst Scotland	LTH	1527	0.100	282	0.018	0.118	234
Robinson & Davidson	DMF & GAL	2921	0.282	3146	0.303	0.585	780
Salveson Homes (Scotland)	LTH	1122	0.086	1703	0.130	0.216	430
J. Smart & Co.	LTH	3918	0.221	9696	0.546	0.767	4177
W. & J.R. Watson	LTH	3231	0.283	4001	0.350	0.633	1495
Whatlings PLC	GW	4340	0.177	2379	0.097	0.274	699
George Wilson	LNK	2745	0.329	1702	0.204	0.534	656
Stewart Milne (Const.)	ABD	2422	0.243	4502	0.453	0.696	2512
Muir Construction	FIFE	628	0.117	1671	0.311	0.427	1191
Industry Totals		200165	0.219	279108	0.269	0.494	169911

BUILDING CONTRACTORS (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Construction PLC	12.939	26445	23524	1.124	0.3	12.6	-
B. & J. Aitken	8.825	1295	1170	1.107	0.4	10.9	-
W. & J. Barr & Sons	13.879	2881	2730	1.055	0.1	1.5	-
Barratt	0.261	8362	6935	1.206	0.2	4.2	-
Bett Brothers	14.661	16157	13072	1.236	0.6	68.1	-
Henry Boot Scotland	1.209	2437	2541	0.959	0.2	91.7	-
G.S. Brown (Construction)	20.114	4498	1571	2.863	0.0	0.1	-
W.H. Brown (Construction)	1.233	1506	1352	1.114	0.1	2.7	-
A.B. Cant	4.535	867	630	1.376	0.1	0.0	-
Chap (Holdings)	2.314	1057	907	1.165	0.5	97.7	-
Christie & Co. (Contractors)	1.775	425	406	1.047	0.7	-	-
Cala PLC	18.476	12509	5534	2.260	0.8	38.6	-
Clachan (Construction)	2.542	2313	1962	1.179	0.2	5.2	-
J. Cochrane & Co.	1.411	366	216	1.694	0.0	0.0	-
D.H. Crighton (Contractors)	5.264	413	855	0.483	0.7	-	-
Cruden Building	0.695	4147	3358	1.235	0.1	2.1	-
Dallfied Construction	1.029	884	787	1.123	1.8	15.1	-
J. Dennis & Co.	2.556	280	148	1.892	0.0	-	-
J. Dickie & Son	3.800	771	578	1.334	0.5	44.3	-
Doric (Construction) Co	2.297	3512	2391	1.469	0.0	5.5	-
Drake & Scull (Scotland)	0.392	5273	3294	1.601	2.9	-	-
Fairclough Scotland	6.090	2654	5424	0.489	0.0	-	-
A. Farquhar	6.606	9703	8257	1.175	1.7	17.4	-
Firholm	1.060	2062	1546	1.334	0.2	0.0	-
Forth Valley (Construction)	0.200	688	504	1.365	1.3	-	-
Front Line (Construction)	1.950	191	222	0.860	5.0	-	-
G.A. Group	3.378	15566	12795	1.217	0.8	0.0	-
Charles Grey Builders	3.079	11925	10202	1.169	0.9	34.0	-
Hart Builders	2.810	4987	2737	1.822	0.0	0.8	-
Hunter (Construction)	5.130	1277	754	1.694	0.0	-	-
Lafferty Construction	2.719	4514	4156	1.086	0.3	10.6	-
J. Lawrence	24.307	19606	18708	1.048	0.9	82.2	-
Lawrence (Construction) Co.	0.052	3035	2465	1.231	1.1	0.0	-
Leech Homes (Scotland)	1.646	6196	3464	1.789	0.5	31.1	-
George Leslie	2.158	1365	1073	1.272	0.3	0.0	-
F.J.C. Lilley PLC	7.831	59329	37021	1.603	0.1	4.0	-
London & Clydeside Est.	3.120	5342	3056	1.748	2.4	3.6	-
Luddon Construction	6.728	1360	1908	0.713	1.7	27.5	-
M.D.W. Holdings PLC	6.324	14517	8408	1.727	0.0	9.3	-
John McColl Wells	1.432	345	330	1.045	1.2	-	-
John G. McGregor	2.167	6144	4912	1.251	0.3	17.8	-
R.J. McLeod	5.214	4306	3709	1.161	0.2	22.8	-
Hugh MacRae & Co.	6.701	4691	3659	1.282	2.6	47.6	-
MacTaggart & Mickel	5.285	17243	784	21.994	0.0	0.0	-
Melville, Dundas & Whitson	4.532	8100	6390	1.268	0.0	0.0	-
Industry Sub-Totals		301544	216445				

Miller (Construction)	0.144	16478	10804	1.525	0.1	0.0	-
Morrison Construction	0.074	2583	2305	1.121	0.0	-	-
Mowlem (Scotland)	0.081	967	616	1.570	0.6	0.0	-
Murdich MacKenzie	3.159	3735	2702	1.382	0.4	-	-
Norwest Holst Scotland	1.182	3708	3660	1.013	4.0	0.0	-
Robinson & Davidson	1.361	3865	1499	2.578	0.0	-	-
Salveson Homes (Scotland)	2.722	9551	8278	1.154	4.0	52.6	-
J. Smart & Co.	8.158	8067	2548	3.166	0.0	0.4	-
W. & J.R. Watson	3.115	4892	2386	2.050	0.3	92.7	-
Whatlings PLC	1.181	9127	7447	1.226	0.4	22.3	-
George Wilson	1.699	2032	986	2.061	0.0	0.0	-
Stewart Milne (Const.)	8.814	4946	2956	1.673	0.2	1.0	-
Muir Construction	8.214	2263	1783	1.269	0.3	16.5	-
Industry Totals	4.666	373758	264415	1.753	0.7	19.4	-

BUILDING CONTRACTORS (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Construction PLC	4859	94150	5.161	6.947	2697	34.909
B. & J. Aitken	62	6065	1.022	18.968	155	39.129
W. & J. Barr & Sons	545	14113	3.862	12.508	330	42.767
Barratt	6710	66130	10.147	6.842	1250	52.904
Bett Brothers	1315	21465	6.126	7.084	757	28.355
Henry Boot Scotland	-101	19183	-0.527	68.731	291	65.921
G.S. Brown (Construction)	845	4221	20.019	2.327	33	127.909
W.H. Brown (Construction)	240	7675	3.127	-1.904	180	42.639
A.B. Cant	71	2831	2.508	20.161	79	35.835
Chap (Holdings)	94	5036	1.867	-26.450	232	21.707
Christie & Co. (Contractors)	48	2250	2.133	-4.903	126	17.857
Cala PLC	1762	21175	8.321	16.763	160	132.344
Clachan (Construction)	-3	8769	-0.034	-11.047	167	52.509
J. Cochrane & Co.	71	1972	3.600	-8.788	90	21.911
D.H. Crighton (Contractors)	208	3835	5.424	10.742	140	27.393
Cruden Building	635	11276	5.631	-29.144	405	27.842
Dallfied Construction	185	5339	3.465	38.173	177	30.164
J. Dennis & Co.	66	1722	3.833	43.142	65	26.492
J. Dickie & Son	145	3875	3.742	32.207	65	59.615
Doric (Construction) Co.	-183	11473	-1.595	0.359	458	25.050
Drake & Scull (Scotland)	-500	14880	-3.360	0.881	487	30.554
Fairclough Scotland	1077	25454	4.231	0.478	631	40.339
A. Farquhar	180	10263	1.754	-19.272	301	34.096
Firholm	55	7771	0.708	-22.056	263	29.548
Forth Valley (Construction)	-156	2079	-7.504	0.048	57	36.474
Front Line (Construction)	161	1215	13.251	-14.497	60	20.250
G.A. Group	1751	42088	4.160	38.429	596	70.617
Charles Grey Builders	459	40597	1.131	11.585	1461	27.787
Hart Builders	788	12054	6.537	9.244	543	22.199
Hunter (Construction)	171	5529	3.093	55.004	153	36.137
Lafferty Construction	731	28943	2.526	73.926	1265	22.880
J. Lawrence	868	64498	1.346	69.171	969	66.561
Lawrence (Construction) Co.	408	14747	2.767	2.795	262	56.286
Leech Homes (Scotland)	865	13373	6.468	76.868	172	77.750
George Leslie	-359	5920	-6.064	3.714	142	41.690
F.J.C. Lilley PLC	13845	230271	6.012	17.089	5641	40.821
London & Clydeside Est.	3780	10668	35.433	33.400	117	91.179
Luddon Construction	17	6761	0.251	-8.721	206	32.820
M.D.W. Holdings PLC	1871	39959	4.682	-12.195	741	53.926
John McColl Wells	17	1549	1.097	28.761	95	16.305
John G. McGregor	446	6090	7.323	-13.800	199	30.603
R.J. McLeod	74	11340	0.653	-34.066	338	33.550
Hugh MacRae & Co.	434	10986	3.950	13.821	266	41.301
MacTaggart & Mickel	914	6867	13.310	6.449	363	18.917
Melville, Dundas & Whitson	1118	28227	3.961	-18.303	528	53.460
Industry Sub-Totals	46589	954684			23713	

Miller (Construction)	716	20233	3.539	20.306	658	30.749
Morrison Construction	1562	19355	8.070	79.329	268	72.220
Mowlem (Scotland)	151	8408	1.796	163.244	156	53.897
Murdich MacKenzie	-481	10905	-4.411	-3.419	252	43.274
Norwest Holst Scotland	596	10897	5.469	-28.931	181	60.204
Robinson & Davidson	813	11705	6.946	12.819	595	19.672
Salveson Homes (Scotland)	-259	13263	-1.953	1.477	165	80.382
J. Smart & Co.	879	12475	7.046	-29.762	421	29.632
W. & J.R. Watson	6	9351	0.064	-18.117	503	18.590
Whatlings PLC	-255	24183	-1.054	-1.475	548	44.130
George Wilson	-162	6912	-2.344	-17.033	304	22.737
Stewart Milne (Const.)	1234	11548	10.686	16.072	361	31.989
Muir Construction	100	5545	1.803	3.105	124	44.718
Industry Totals	51489	1119464	4.599	10.460	28249	39.628

BUILDING CONTRACTORS (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Construction PLC	ABD	20247	0.215	59620	0.633	0.848	60364
B. & J. Aitken	GW	1237	0.204	1264	0.208	0.412	753
W. & J. Barr & Sons	AYR	3279	0.232	3829	0.271	0.504	4351
Barratt	ABD	4434	0.067	2079	0.031	0.098	372
Bett Brothers	PTH & KIN	4941	0.230	20947	0.976	1.206	14684
Henry Boot Scotland	GW	2479	0.129	86	0.004	0.134	14
G.S. Brown (Construction)	PTH & KIN	210	0.050	4099	0.971	1.021	669
W.H. Brown (Construction)	PTH & KIN	1550	0.202	596	0.078	0.280	281
A.B. Cant	FIFE	501	0.177	429	0.152	0.329	199
Chap (Holdings)	ABD	1569	0.312	867	0.172	0.484	619
Christie & Co. (Contractors)	FIFE	786	0.349	272	0.121	0.470	206
Cala PLC	LTH	1688	0.080	10779	0.509	0.589	1849
Clachan (Construction)	GW	867	0.099	810	0.092	0.191	496
J. Cochrane & Co.	GW	688	0.349	307	0.156	0.505	164
D.H. Crighton (Contractors)	LTH	-	-	504	0.131	-	932
Cruden Building	GW	3267	0.290	1606	0.142	0.432	437
Dallfied Construction	GW	1352	0.253	489	0.092	0.345	304
J. Dennis & Co.	STIR	429	0.249	-	-	-	166
J. Dickie & Son	GW	-	-	607	0.157	-	326
Doric (Construction) Co.	ABD	3335	0.291	2056	0.179	0.470	1248
Drake & Scull (Scotland)	GW	3741	0.251	2124	0.143	0.394	244
Fairclough Scotland	GW	5075	0.199	1050	0.041	0.241	3209
A. Farquhar	ABD	2098	0.204	3560	0.347	0.551	2051
Firholm	LNK	2032	0.261	841	0.108	0.370	260
Forth Valley (Construction)	STIR	458	0.220	128	0.062	0.282	116
Front Line (Construction)	GW	394	0.324	250	0.206	0.530	167
G.A. Group	GW	5356	0.127	1295	0.031	0.158	1731
Charles Grey Builders	PTH & KIN	10324	0.254	6370	0.157	0.411	4791
Hart Builders	LTH	4134	0.343	1438	0.119	0.462	537
Hunter (Construction)	ABD	1165	0.211	1388	0.251	0.462	883
Lafferty Construction	GW	9681	0.334	4005	0.138	0.473	3379
J. Lawrence	GW	7285	0.113	23009	0.357	0.470	22606
Lawrence (Construction) Co.	GW	2426	0.165	993	0.067	0.232	20
Leech Homes (Scotland)	FLK	1350	0.101	4122	0.308	0.409	194
George Leslie	GW	1228	0.207	644	0.109	0.316	2
F.J.C. Lilley PLC	GW	50773	0.220	71320	0.310	0.530	49174
London & Clydeside Est.	GW	370	0.035	4349	0.408	0.442	401
Luddon Construction	GW	1856	0.275	1042	0.154	0.429	1523
M.D.W. Holdings PLC	GW	5867	0.147	12797	0.320	0.467	8711
John McColl Wells	DMF & GAL	592	0.382	163	0.105	0.487	181
John G. McGregor	HLAND	1378	0.226	2214	0.364	0.590	346
R.J. McLeod	GW	3115	0.275	2829	0.249	0.524	1664
Hugh MacRae & Co.	HLAND	2219	0.202	3120	0.284	0.486	1774
MacTaggart & Mickel	GW	2593	0.378	20488	2.984	3.361	2012
Melville, Dundas & Whitson	GW	4164	0.148	4924	0.174	0.322	4311
Industry Sub-Totals		182533		285709			198731

Miller (Construction)	LTH	5913	0.292	6182	0.306	0.598	129
Morrison Construction	HLAND	-	-	1398	0.072	-	57
Mowlem (Scotland)	GW	861	0.102	414	0.049	0.152	279
Murdich MacKenzie	LNK	2111	0.194	1319	0.121	0.315	621
Norwest Holst Scotland	LTH	1511	0.139	389	0.036	0.174	225
Robinson & Davidson	DMF & GAL	3383	0.289	3932	0.336	0.625	979
Salveson Homes (Scotland)	LTH	1191	0.090	1544	0.116	0.206	113
J. Smart & Co.	LTH	3452	0.277	10327	0.828	1.105	5037
W. & J.R. Watson	LTH	3669	0.392	4369	0.467	0.860	1472
Whatlings PLC	GW	4406	0.182	2863	0.118	0.301	1090
George Wilson	LNK	2368	0.343	1619	0.234	0.577	702
Stewart Milne (Const.)	ABD	3024	0.262	1096	0.095	0.357	2975
Muir Construction	FIFE	598	0.108	1685	0.304	0.412	1061
Industry Totals		215020	0.219	322846	0.280	0.507	213471

BUILDING CONTRACTORS (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Construction PLC	22.382	31218	31962	0.977	0.3	18.1	0.0
B. & J. Aitken	4.858	1838	1327	1.385	0.3	40.4	-
W. & J. Barr & Sons	13.185	4082	4604	0.887	0.2	7.3	0.0
Barratt	0.298	23546	21839	1.078	0.1	9.2	-
Bett Brothers	19.398	14818	8555	1.732	0.5	35.4	-
Henry Boot Scotland	0.048	3949	3877	1.019	1.0	-	-
G.S. Brown (Construction)	20.273	4341	911	4.765	0.0	0.6	-
W.H. Brown (Construction)	1.561	1506	1352	1.114	0.1	4.0	0.0
A.B. Cant	2.519	1084	854	1.269	0.1	6.6	-
Chap (Holdings)	2.668	1083	835	1.297	0.2	16.1	0.0
Christie & Co. (Contractors)	1.635	395	329	1.201	0.2	11.1	-
Cala PLC	11.556	15630	6700	2.333	0.7	32.2	-
Clachan (Construction)	2.970	2579	2265	1.139	0.6	107.7	0.0
J. Cochrane & Co.	1.822	385	242	1.591	0.0	1.4	-
D.H. Crighton (Contractors)	6.657	372	800	0.465	0.7	-	-
Cruden Building	1.079	4165	2996	1.390	0.1	1.9	-
Dallfied Construction	1.718	1062	877	1.211	1.3	11.5	-
J. Dennis & Co.	2.554	339	146	2.322	0.0	-	-
J. Dickie & Son	5.015	1553	1289	1.205	1.1	11.6	0.0
Doric (Construction) Co	2.725	3124	1316	2.374	0.0	-	0.0
Drake & Scull (Scotland)	0.501	4801	2921	1.644	25.6	-	-
Fairclough Scotland	5.086	3094	5253	0.589	0.1	-	0.0
A. Farquhar	6.847	7648	6149	1.244	1.1	64.1	0.0
Firholm	0.989	1951	1370	1.424	0.0	0.0	-
Forth Valley (Construction)	2.035	1096	1084	1.011	6.7	-	-
Front Line (Construction)	2.783	281	198	1.419	0.5	0.6	-
G.A. Group	2.904	11312	12052	0.939	0.0	1.5	-
Charles Grey Builders	3.279	13958	12379	1.128	1.2	52.5	-
Hart Builders	0.989	4180	3279	1.275	0.0	0.0	-
Hunter (Construction)	5.771	1928	1423	1.355	0.2	16.2	0.0
Lafferty Construction	2.671	7302	6676	1.094	1.0	27.4	0.0
J. Lawrence	23.329	19112	18709	1.022	0.8	67.3	-
Lawrence (Construction) Co.	0.076	7804	6831	1.142	5.0	0.0	-
Leech Homes (Scotland)	1.128	7606	3678	2.068	0.1	1.5	-
George Leslie	0.014	1797	1155	1.556	0.1	-	-
F.J.C. Lilley PLC	8.717	66528	44382	1.499	0.1	4.4	-
London & Clydeside Est.	3.427	10598	6610	1.603	0.8	8.6	-
Luddon Construction	7.393	1493	1974	0.756	1.3	72.6	-
M.D.W. Holdings PLC	11.756	14611	10525	1.388	0.2	-	-
John McColl Wells	1.905	464	163	2.847	1.3	22.7	-
John G. McGregor	1.739	5856	3989	1.468	0.5	28.9	-
R.J. McLeod	4.923	3435	2270	1.513	0.2	28.2	0.0
Hugh MacRae & Co.	6.669	6207	4861	1.277	2.6	51.1	0.0
MacTaggart & Mickel	5.543	19652	1176	16.711	0.0	0.0	-
Melville, Dundas & Whitson	8.165	6190	5577	1.110	0.0	0.0	-
Industry Sub-Totals		345973	257760				

Miller (Construction)	0.196	15977	9914	1.612	0.0	-	0.0
Morrison Construction	0.213	4410	3069	1.437	-	-	-
Mowlem (Scotland)	1.788	1613	1478	1.091	0.3	1.3	0.0
Murdich MacKenzie	2.464	2847	2149	1.325	0.5	-	-
Norwest Holst Scotland	1.243	3672	3508	1.047	1.8	0.0	0.0
Robinson & Davidson	1.645	4776	1823	2.620	0.1	-	-
Salveson Homes (Scotland)	0.685	12508	11077	1.129	6.2	243.9	-
J. Smart & Co.	11.964	8058	2768	2.911	0.0	0.0	-
W. & J.R. Watson	2.926	5024	2127	2.362	0.3	95.0	0.9
Whatlings PLC	1.989	9975	8202	1.216	0.8	-	-
George Wilson	2.309	1673	756	2.213	0.0	-	0.0
Stewart Milne (Const.)	8.241	2281	2211	1.032	0.4	10.9	0.0
Muir Construction	8.556	2710	2086	1.299	0.5	26.5	-
Industry Totals	4.962	421497	308928	1.744	1.2	26.5	0.0

BUILDING CONTRACTORS (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Construction PLC	3673	100001	3.673	6.215	2713	36.860
B. & J. Aitken	142	7233	1.963	19.258	124	58.331
W. & J. Barr & Sons	455	18897	2.408	33.898	336	56.241
Barratt	1503	59763	2.515	-9.628	1142	52.332
Bett Brothers	824	16048	5.135	-25.236	502	31.968
Henry Boot Scotland	670	31094	2.155	62.091	332	93.657
G.S. Brown (Construction)	1008	4895	20.592	15.968	46	106.413
W.H. Brown (Construction)	295	9584	3.078	24.873	198	48.404
A.B. Cant	3	3485	0.086	23.101	140	24.893
Chap (Holdings)	255	6606	3.860	31.176	238	27.756
Christie & Co. (Contractors)	87	2717	3.202	20.756	130	20.900
Cala PLC	2336	19495	11.983	-7.934	146	133.527
Clachan (Construction)	83	9347	0.888	6.591	139	67.245
J. Cochrane & Co.	102	2812	3.627	42.596	83	33.880
D.H. Crighton (Contractors)	218	3577	6.094	-6.728	136	26.301
Cruden Building	459	13155	3.489	16.664	434	30.311
Dallfied Construction	184	6416	2.868	20.172	184	34.870
J. Dennis & Co.	58	1655	3.505	-3.891	66	25.076
J. Dickie & Son	223	5549	4.019	43.200	140	39.636
Doric (Construction) Co.	71	12012	0.591	4.698	489	24.564
Drake & Scull (Scotland)	129	11295	1.142	-24.093	329	34.331
Fairclough Scotland	1257	24124	5.211	-5.225	566	42.622
A. Farquhar	272	12257	2.219	19.429	297	41.269
Firholm	125	9709	1.287	24.939	238	40.794
Forth Valley (Construction)	-34	1643	-2.069	-20.972	55	29.873
Front Line (Construction)	190	1506	12.616	23.951	51	29.529
G.A. Group	560	38986	1.436	-7.370	568	68.637
Charles Grey Builders	678	39546	1.714	-2.589	1453	27.217
Hart Builders	842	12200	6.902	1.211	496	24.597
Hunter (Construction)	134	5903	2.270	6.764	178	33.163
Lafferty Construction	-557	18754	-2.970	-35.204	1054	17.793
J. Lawrence	-363	71178	-0.510	10.357	882	80.701
Lawrence (Construction) Co.	325	12546	2.590	-14.925	236	53.161
Leech Homes (Scotland)	275	6847	4.016	-48.800	147	46.578
George Leslie	102	5388	1.893	-8.986	133	40.511
F.J.C. Lilley PLC	7494	301292	2.487	30.842	6046	49.833
London & Clydeside Est.	3335	12312	27.087	15.411	128	96.188
Luddon Construction	-18	7980	-0.226	18.030	225	35.467
M.D.W. Holdings PLC	2132	48306	4.414	20.889	829	58.270
John McColl Wells	68	2019	3.368	30.342	104	19.413
John G. McGregor	103	4729	2.178	-22.348	141	33.539
R.J. McLeod	333	14253	2.336	25.688	304	46.885
Hugh MacRae & Co.	140	10721	1.306	-2.412	243	44.119
MacTaggart & Mickel	1669	7232	23.078	5.315	415	17.427
Melville, Dundas & Whitson	1185	35414	3.346	25.461	528	67.072
Industry Sub-Totals	33025	1050481			23364	

Miller (Construction)	1321	33674	3.923	66.431	627	53.707
Morrison Construction	99	36385	0.272	87.988	264	137.822
Mowlem (Scotland)	-851	9299	-9.152	10.597	167	55.683
Murdich MacKenzie	-682	7868	-8.668	-27.850	186	42.301
Norwest Holst Scotland	32	14896	0.215	36.698	252	59.111
Robinson & Davidson	982	13053	7.523	11.516	621	21.019
Salveson Homes (Scotland)	205	12115	1.692	-8.656	96	126.198
J. Smart & Co.	1276	9910	12.876	-20.561	386	25.674
W. & J.R. Watson	-835	11789	-7.083	26.072	574	20.538
Whatlings PLC	953	29135	3.271	20.477	582	50.060
George Wilson	-272	6572	-4.139	-4.919	320	20.538
Stewart Milne (Const.)	935	17215	5.431	49.073	384	44.831
Muir Construction	51	8464	0.603	52.642	93	91.011
Industry Totals	36239	1260856	2.874	12.630	27916	45.166

BUILDING CONTRACTORS (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Construction PLC	ABD	21789	0.218	64628	0.646	0.864	61545
B. & J. Aitken	GW	1029	0.142	1530	0.212	0.354	764
W. & J. Barr & Sons	AYR	3540	0.187	3832	0.203	0.390	4035
Barratt	ABD	5136	0.086	2717	0.045	0.131	198
Bett Brothers	PTH & KIN	3208	0.200	21822	1.360	1.560	16249
Henry Boot Scotland	GW	2985	0.096	248	0.008	0.104	7
G.S. Brown (Construction)	PTH & KIN	259	0.053	4584	0.936	0.989	623
W.H. Brown (Construction)	PTH & KIN	2205	0.230	778	0.081	0.311	306
A.B. Cant	FIFE	891	0.256	431	0.124	0.379	175
Chap (Holdings)	ABD	1775	0.269	1047	0.158	0.427	802
Christie & Co. (Contractors)	FIFE	843	0.310	364	0.134	0.444	233
Cala PLC	LTH	1563	0.080	9131	0.468	0.549	1237
Clachan (Construction)	GW	802	0.086	-	-	-	-
J. Cochrane & Co.	GW	775	0.276	347	0.123	0.399	178
D.H. Crighton (Contractors)	LTH	-	-	722	0.202	-	1834
Cruden Building	GW	3566	0.271	1334	0.101	0.372	379
Dallfied Construction	GW	1619	0.252	701	0.109	0.362	401
J. Dennis & Co.	STIR	407	0.246	-	-	-	-
J. Dickie & Son	GW	1077	0.194	822	0.148	0.342	322
Doric (Construction) Co.	ABD	3567	0.297	2169	0.181	0.478	1275
Drake & Scull (Scotland)	GW	2630	0.233	860	0.076	0.309	206
Fairclough Scotland	GW	4829	0.200	1113	0.046	0.246	2259
A. Farquhar	ABD	2390	0.195	3051	0.249	0.444	2118
Firholm	LNK	1940	0.200	960	0.099	0.299	271
Forth Valley (Construction)	STIR	-	-	-	-	-	-
Front Line (Construction)	GW	397	0.264	372	0.247	0.511	231
G.A. Group	GW	5549	0.142	1746	0.045	0.187	2291
Charles Grey Builders	PTH & KIN	10643	0.269	5158	0.130	0.400	3877
Hart Builders	LTH	4028	0.330	1357	0.111	0.441	464
Hunter (Construction)	ABD	1330	0.225	1408	0.239	0.464	999
Lafferty Construction	GW	7628	0.407	3157	0.168	0.575	2883
J. Lawrence	GW	6900	0.097	21226	0.298	0.395	21087
Lawrence (Construction) Co.	GW	1929	0.154	1262	0.101	0.254	14
Leech Homes (Scotland)	FLK	1157	0.169	4134	0.604	0.773	294
George Leslie	GW	1102	0.205	721	0.134	0.338	89
F.J.C. Lilley PLC	GW	64804	0.215	85624	0.284	0.499	63377
London & Clydeside Est.	GW	1564	0.127	5064	0.411	0.538	430
Luddon Construction	GW	1824	0.229	1083	0.136	0.364	1566
M.D.W. Holdings PLC	GW	7172	0.148	14046	0.291	0.439	8885
John McColl Wells	DMF & GAL	705	0.349	227	0.112	0.462	181
John G. McGregor	HLAND	1243	0.263	2391	0.506	0.768	437
R.J. McLeod	GW	3016	0.212	2845	0.200	0.411	1713
Hugh MacRae & Co.	HLAND	2202	0.205	2837	0.265	0.470	1682
MacTaggart & Mickel	GW	3313	0.458	22655	3.133	3.591	2618
Melville, Dundas & Whitson	GW	5157	0.146	5680	0.160	0.306	4406
Industry Sub-Totals		200488		306184			212941

Miller (Construction)	LTH	5822	0.173	6949	0.206	0.379	172
Morrison Construction	HLAND	1596	0.044	1398	0.038	0.082	114
Mowlem (Scotland)	GW	1212	0.130	-127	-0.014	0.117	299
Murdich MacKenzie	LNK	1234	0.157	653	0.083	0.240	322
Norwest Holst Scotland	LTH	2027	0.136	367	0.025	0.161	504
Robinson & Davidson	DMF & GAL	3734	0.286	4273	0.327	0.613	1024
Salveson Homes (Scotland)	LTH	838	0.069	1689	0.139	0.209	139
J. Smart & Co.	LTH	3386	0.342	10511	1.061	1.402	5546
W. & J.R. Watson	LTH	4464	0.379	3742	0.317	0.696	2213
Whatlings PLC	GW	4622	0.159	3603	0.124	0.282	1433
George Wilson	LNK	2732	0.416	1342	0.204	0.620	552
Stewart Milne (Const.)	ABD	3303	0.192	770	0.045	0.237	3346
Muir Construction	FIFE	609	0.072	1726	0.204	0.276	605
Industry Totals		236067	0.210	343080	0.292	0.505	229210

BUILDING CONTRACTORS (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Construction PLC	22.685	32686	29608	1.104	0.3	31.9	0.0
B. & J. Aitken	6.161	1472	625	2.355	0.1	2.7	0.0
W. & J. Barr & Sons	12.009	5003	5206	0.961	0.8	22.6	0.0
Barratt	0.173	18680	16161	1.156	0.2	9.7	-
Bett Brothers	32.369	13950	8147	1.712	0.5	49.1	-
Henry Boot Scotland	0.021	5807	5566	1.043	1.0	0.0	-
G.S. Brown (Construction)	13.543	4856	895	5.426	0.0	1.9	-
W.H. Brown (Construction)	1.545	2344	2581	0.908	0.4	-	0.0
A.B. Cant	1.250	1118	862	1.297	0.2	80.0	-
Chap (Holdings)	3.370	1623	1378	1.178	0.2	8.6	0.0
Christie & Co. (Contractors)	1.792	577	446	1.294	0.2	7.4	-
Cala PLC	8.473	15792	7898	1.999	0.1	17.7	-
Clachan (Construction)	-	-	-	-	3.2	-	0.0
J. Cochrane & Co.	2.145	368	199	1.849	0.0	1.0	-
D.H. Crighton (Contractors)	13.485	442	1554	0.284	1.2	-	-
Cruden Building	0.873	4228	3273	1.292	0.1	2.5	-
Dallfied Construction	2.179	1556	1256	1.239	1.4	16.7	-
J. Dennis & Co.	-	-	-	-	0.5	6.3	-
J. Dickie & Son	2.300	1403	903	1.554	0.1	1.3	0.0
Doric (Construction) Co.	2.607	3179	2285	1.391	0.0	18.4	0.0
Drake & Scull (Scotland)	0.626	3285	2631	1.249	3.1	0.0	-
Fairclough Scotland	3.991	4456	5602	0.795	0.2	-	0.0
A. Farquhar	7.131	8001	7068	1.132	1.7	159.8	0.0
Firholm	1.139	2398	1709	1.403	0.4	6.7	-
Forth Valley (Construction)	-	-	-	-	-	-	-
Front Line (Construction)	4.529	528	387	1.364	0.5	0.5	-
G.A. Group	4.033	9779	10754	0.909	0.9	0.2	-
Charles Grey Builders	2.668	14485	13204	1.097	1.4	-	-
Hart Builders	0.935	4683	3800	1.232	0.0	0.0	-
Hunter (Construction)	5.612	2037	1628	1.251	0.4	33.0	0.0
Lafferty Construction	2.735	6745	6471	1.042	1.2	-	0.0
J. Lawrence	23.908	23285	23152	1.006	1.0	115.8	1.8
Lawrence (Construction) Co.	0.059	8188	6940	1.180	3.8	0.0	-
Leech Homes (Scotland)	2.000	8019	4179	1.919	0.2	1.1	-
George Leslie	0.669	1711	1089	1.571	0.1	19.0	0.0
F.J.C. Lilley PLC	10.482	121480	99233	1.224	0.6	19.0	-
London & Clydeside Est.	3.359	12349	7715	1.601	0.9	-	-
Luddon Construction	6.960	1774	2179	0.814	1.9	156.3	-
M.D.W. Holdings PLC	10.718	16307	11146	1.463	0.1	0.0	-
John McColl Wells	1.740	563	227	2.480	1.0	4.2	-
John G. McGregor	3.099	6671	4717	1.414	0.8	37.8	-
R.J. McLeod	5.635	3986	2836	1.406	0.1	7.8	-
Hugh MacRae & Co.	6.922	5836	4681	1.247	2.1	81.6	0.0
MacTaggart & Mickel	6.308	22143	2096	10.564	0.0	-	-
Melville, Dundas & Whitson	8.345	7954	6680	1.191	0.0	0.0	-
Industry Sub-Totals		411747	318967				

Miller (Construction)	0.274	17094	10317	1.657	0.0	-	7.7
Morrison Construction	0.432	4410	3069	1.437	0.0	0.0	0.0
Mowlem (Scotland)	1.790	2204	2630	0.838	-	-	0.0
Murdich MacKenzie	1.731	2047	1716	1.193	1.0	-	-
Norwest Holst Scotland	2.000	2631	2768	0.951	7.3	-	0.0
Robinson & Davidson	1.649	5576	2327	2.396	0.1	-	-
Salveson Homes (Scotland)	1.448	12478	10928	1.142	4.8	0.0	-
J. Smart & Co.	14.368	7595	2151	3.531	0.0	0.0	-
W. & J.R. Watson	3.855	3426	1897	1.806	0.2	-	0.5
Whatlings PLC	2.462	13486	11316	1.192	1.2	29.9	-
George Wilson	1.725	1560	770	2.026	0.1	-	0.0
Stewart Milne (Const.)	8.714	2537	2787	0.910	0.6	25.1	0.0
Muir Construction	6.505	5975	4854	1.231	0.3	36.3	-
Industry Totals	5.410	492766	376497	1.616	0.9	24.1	0.5

BUILDING CONTRACTORS (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Construction PLC	3335	96919	3.441	-3.082	2471	39.223
B. & J. Aitken	92	4278	2.151	-40.854	97	44.103
W. & J. Barr & Sons	526	16016	3.284	-15.246	319	50.207
Barratt	585	30474	1.920	-49.009	983	31.001
Bett Brothers	849	15415	5.508	-3.944	431	35.766
Henry Boot Scotland	357	13708	2.604	-55.914	201	68.199
G.S. Brown (Construction)	780	4986	15.644	1.859	48	103.875
W.H. Brown (Construction)	-298	10831	-2.751	13.011	262	41.340
A.B. Cant	38	3210	1.184	-7.891	139	23.094
Chap (Holdings)	288	7413	3.885	12.216	254	29.185
Christie & Co. (Contractors)	16	2170	0.737	-20.132	128	16.953
Cala PLC	3107	28171	11.029	44.504	152	185.336
Clachan (Construction)	50	3994	1.252	-57.270	79	50.557
J. Cochrane & Co.	48	2599	1.847	-7.575	83	31.313
D.H. Crighton (Contractors)	-141	3822	-3.689	6.849	138	27.696
Cruden Building	526	9201	5.717	-30.057	310	29.681
Dallfied Construction	414	8537	4.849	33.058	266	32.094
J. Dennis & Co.	155	2339	6.627	41.329	72	32.486
J. Dickie & Son	178	4962	3.587	-10.578	113	43.912
Doric (Construction) Co.	-351	13987	-2.509	16.442	523	26.744
Drake & Scull (Scotland)	497	12899	3.853	14.201	370	34.862
Fairclough Scotland	1004	30377	3.305	25.920	508	59.797
A. Farquhar	56	9301	0.602	-24.117	292	31.853
Firholm	63	13966	0.451	43.846	285	49.004
Forth Valley (Construction)	-16	1431	-1.118	-12.903	45	31.800
Front Line (Construction)	247	2085	11.847	38.446	50	41.700
G.A. Group	701	42736	1.640	9.619	549	77.843
Charles Grey Builders	-259	36502	-0.710	-7.697	987	36.983
Hart Builders	587	12018	4.884	-1.492	471	25.516
Hunter (Construction)	-32	5174	-0.618	-12.350	163	31.742
Lafferty Construction	141	16231	0.869	-13.453	682	23.799
J. Lawrence	715	75729	0.944	6.394	886	85.473
Lawrence (Construction) Co.	-648	13792	-4.698	9.931	182	75.780
Leech Homes (Scotland)	303	8115	3.734	18.519	152	53.388
George Leslie	77	4889	1.575	-9.261	119	41.084
F.J.C. Lilley PLC	9537	357409	2.668	18.625	6551	54.558
London & Clydeside Est.	1838	15698	11.708	27.502	199	78.884
Luddon Construction	38	9075	0.419	13.722	211	43.009
M.D.W. Holdings PLC	2251	57597	3.908	19.234	853	67.523
John McColl Wells	89	2346	3.794	16.196	107	21.925
John G. McGregor	213	4999	4.261	5.709	114	43.851
R.J. McLeod	228	14941	1.526	4.827	322	46.401
Hugh MacRae & Co.	-499	10742	-4.645	0.196	228	47.114
MacTaggart & Mickel	1561	9047	17.254	25.097	404	22.394
Melville, Dundas & Whitson	1214	41190	2.947	16.310	634	64.968
Industry Sub-Totals	30460	1091321			22433	

Miller (Construction)	1396	41213	3.387	22.388	829	49.714
Morrison Construction	57	48826	0.117	34.193	1024	47.682
Mowlem (Scotland)	-850	13539	-6.278	45.596	188	72.016
Murdich MacKenzie	-469	651	-72.043	-91.726	48	13.563
Norwest Holst Scotland	-588	17374	-3.384	16.635	219	79.333
Robinson & Davidson	1063	13560	7.839	3.884	590	22.983
Salveson Homes (Scotland)	198	12447	1.591	2.740	119	104.597
J. Smart & Co.	1361	14444	9.423	45.752	401	36.020
W. & J.R. Watson	-162	9848	-1.645	-16.465	466	21.133
Whatlings PLC	1009	38322	2.633	31.533	536	71.496
George Wilson	-288	6185	-4.656	-5.889	301	20.548
Stewart Milne (Const.)	123	8852	1.390	-48.580	262	33.786
Muir Construction	1503	11571	12.989	36.708	114	101.500
Industry Totals	34813	1328153	2.621	5.337	27530	48.244

BUILDING CONTRACTORS (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Construction PLC	ABD	20310	0.210	53882	0.556	0.766	52405
B. & J. Aitken	GW	858	0.201	1606	0.375	0.576	677
W. & J. Barr & Sons	AYR	3696	0.231	3867	0.241	0.472	3475
Barratt	ABD	4960	0.163	2360	0.077	0.240	179
Bett Brothers	PTH & KIN	2550	0.165	23971	1.555	1.720	17388
Henry Boot Scotland	GW	1946	0.142	304	0.022	0.164	2
G.S. Brown (Construction)	PTH & KIN	324	0.065	5028	1.008	1.073	631
W.H. Brown (Construction)	PTH & KIN	2088	0.193	638	0.059	0.252	1052
A.B. Cant	FIFE	-	-	-	-	-	-
Chap (Holdings)	ABD	2070	0.279	1189	0.160	0.440	998
Christie & Co. (Contractors)	FIFE	772	0.356	340	0.157	0.512	228
Cala PLC	LTH	1887	0.067	17570	0.624	0.691	1469
Clachan (Construction)	GW	-	-	-	-	-	-
J. Cochrane & Co.	GW	685	0.264	387	0.149	0.412	191
D.H. Crighton (Contractors)	LTH	180	0.047	672	0.176	0.223	1664
Cruden Building	GW	2516	0.273	1213	0.132	0.405	347
Dallfied Construction	GW	1817	0.213	1200	0.141	0.353	740
J. Dennis & Co.	STIR	-	-	-	-	-	-
J. Dickie & Son	GW	897	0.181	972	0.196	0.377	358
Doric (Construction) Co.	ABD	4158	0.297	1781	0.127	0.425	1307
Drake & Scull (Scotland)	GW	3121	0.242	732	0.057	0.299	158
Fairclough Scotland	GW	4707	0.155	1188	0.039	0.194	2623
A. Farquhar	ABD	2158	0.232	3068	0.330	0.562	1933
Firholm	LNK	2427	0.174	1021	0.073	0.247	300
Forth Valley (Construction)	STIR	-	-	-	-	-	-
Front Line (Construction)	GW	518	0.248	597	0.286	0.535	348
G.A. Group	GW	5672	0.133	1867	0.044	0.176	1567
Charles Grey Builders	PTH & KIN	7974	0.218	1986	0.054	0.273	2740
Hart Builders	LTH	4103	0.341	1224	0.102	0.443	387
Hunter (Construction)	ABD	1303	0.252	1369	0.265	0.516	965
Lafferty Construction	GW	5643	0.348	2985	0.184	0.532	2066
J. Lawrence	GW	7933	0.105	20582	0.272	0.377	22326
Lawrence (Construction) Co.	GW	1711	0.124	842	0.061	0.185	3
Leech Homes (Scotland)	FLK	-	-	-	-	-	-
George Leslie	GW	1113	0.228	774	0.158	0.386	256
F.J.C. Lilley PLC	GW	77090	0.216	82577	0.231	0.447	48185
London & Clydeside Est.	GW	1963	0.125	6878	0.438	0.563	468
Luddon Construction	GW	2304	0.254	931	0.103	0.356	1339
M.D.W. Holdings PLC	GW	7661	0.133	14236	0.247	0.380	9613
John McColl Wells	DMF & GAL	715	0.305	222	0.095	0.399	200
John G. McGregor	HLAND	1313	0.263	1338	0.268	0.530	414
R.J. McLeod	GW	3390	0.227	2757	0.185	0.411	1935
Hugh MacRae & Co.	HLAND	2263	0.211	1492	0.139	0.350	1317
MacTaggart & Mickel	GW	3182	0.352	24043	2.658	3.009	2399
Melville, Dundas & Whitson	GW	5500	0.134	5712	0.139	0.272	4480
Industry Sub-Totals		205478		295401			189133

Miller (Construction)	LTH	8667	0.210	7698	0.187	0.397	622
Morrison Construction	HLAND	5328	0.109	1470	0.030	0.139	114
Mowlem (Scotland)	GW	1736	0.128	47	0.003	0.132	182
Murdich MacKenzie	LNK	877	1.347	391	0.601	1.948	147
Norwest Holst Scotland	LTH	2081	0.120	-222	-0.013	0.107	208
Robinson & Davidson	DMF & GAL	3700	0.273	4679	0.345	0.618	1542
Salveson Homes (Scotland)	LTH	905	0.073	3062	0.246	0.319	158
J. Smart & Co.	LTH	3731	0.258	11520	0.798	1.056	6349
W. & J.R. Watson	LTH	3584	0.364	3852	0.391	0.755	2141
Whatlings PLC	GW	4615	0.120	4093	0.107	0.227	1859
George Wilson	LNK	2499	0.404	1289	0.208	0.612	1455
Stewart Milne (Const.)	ABD	2852	0.322	732	0.083	0.405	891
Muir Construction	FIFE	726	0.063	2593	0.224	0.287	635
Industry Totals		246779	0.229	336605	0.290	0.520	205436

BUILDING CONTRACTORS (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Construction PLC	21.208	30584	29107	1.051	0.4	38.6	0.0
B. & J. Aitken	6.979	1952	1023	1.908	0.1	5.2	0.0
W. & J. Barr & Sons	10.893	5337	4945	1.079	0.5	28.8	0.0
Barratt	0.182	15823	13642	1.160	1.4	14.7	-
Bett Brothers	40.343	15509	8926	1.738	0.6	54.0	-
Henry Boot Scotland	0.010	4012	3710	1.081	0.6	0.0	-
G.S. Brown (Construction)	13.146	5215	818	6.375	0.0	1.6	-
W.H. Brown (Construction)	4.015	1812	2226	0.814	0.9	-	0.0
A.B. Cant	-	-	-	-	-	-	-
Chap (Holdings)	3.929	1986	1795	1.106	0.4	20.0	0.0
Christie & Co. (Contractors)	1.781	545	433	1.259	1.0	34.1	-
Cala PLC	9.664	24433	8332	2.932	0.2	18.6	-
Clachan (Construction)	-	-	-	-	-	-	-
J. Cochrane & Co.	2.301	479	283	1.693	0.0	0.8	-
D.H. Crighton (Contractors)	12.058	720	1712	0.421	1.0	-	-
Cruden Building	1.119	3094	2228	1.389	0.1	2.2	-
Dallfied Construction	2.782	1952	1492	1.308	1.1	11.0	-
J. Dennis & Co.	-	-	-	-	-	-	-
J. Dickie & Son	3.168	1974	1360	1.451	0.5	2.2	0.0
Doric (Construction) Co.	2.499	4003	3529	1.134	0.4	-	0.0
Drake & Scull (Scotland)	0.427	3498	2924	1.196	1.4	0.0	-
Fairclough Scotland	5.163	4150	5585	0.743	0.2	-	0.0
A. Farquhar	6.620	9365	8230	1.138	2.0	63.4	0.0
Firholm	1.053	3061	2340	1.308	0.1	0.0	-
Forth Valley (Construction)	-	-	-	-	-	-	-
Front Line (Construction)	6.960	863	614	1.406	0.5	0.5	-
G.A. Group	2.854	11382	11082	1.027	0.8	1.0	-
Charles Grey Builders	2.776	9533	10287	0.927	2.8	290.4	-
Hart Builders	0.822	3570	2733	1.306	0.0	0.0	-
Hunter (Construction)	5.920	2523	2119	1.191	0.8	160.4	0.0
Lafferty Construction	3.029	7767	6848	1.134	1.4	75.8	0.0
J. Lawrence	25.199	19790	21534	0.919	1.0	83.0	2.1
Lawrence (Construction) Co.	0.016	6531	5692	1.147	4.5	-	-
Leech Homes (Scotland)	-	-	-	-	-	-	-
George Leslie	2.151	1578	1060	1.489	0.0	11.5	0.0
F.J.C. Lilley PLC	7.355	115098	80706	1.426	0.4	26.4	-
London & Clydeside Est.	2.352	15377	8967	1.715	1.0	22.2	-
Luddon Construction	6.346	1712	2120	0.808	1.3	58.2	-
M.D.W. Holdings PLC	11.270	17579	12954	1.357	0.1	-	-
John McColl Wells	1.869	638	616	1.036	1.1	-	-
John G. McGregor	3.632	7385	5461	1.352	2.1	23.0	-
R.J. McLeod	6.009	3646	2824	1.291	0.1	9.2	-
Hugh MacRae & Co.	5.776	5227	4495	1.163	1.8	74.2	-
MacTaggart & Mickel	5.938	23723	2079	11.411	0.0	-	-
Melville, Dundas & Whitson	7.066	9097	7865	1.157	0.0	0.0	-
Industry Sub-Totals		402523	294696				

Miller (Construction)	0.750	23120	16044	1.441	0.2	0.4	13.4
Morrison Construction	0.111	11218	9862	1.137	0.0	0.0	0.0
Mowlem (Scotland)	0.968	3360	3495	0.961	5.6	-	0.0
Murdich MacKenzie	3.063	950	706	1.346	0.2	-	-
Norwest Holst Scotland	0.950	4499	5029	0.895	-	-	0.0
Robinson & Davidson	2.614	5481	2344	2.338	0.1	-	-
Salveson Homes (Scotland)	1.328	13402	10498	1.277	3.5	0.0	-
J. Smart & Co.	15.833	7350	2179	3.373	0.0	0.0	-
W. & J.R. Watson	4.594	3346	1635	2.046	0.2	-	0.3
Whatlings PLC	3.468	14920	12686	1.176	1.2	23.0	-
George Wilson	4.834	1561	1727	0.904	1.0	-	-
Stewart Milne (Const.)	3.401	2080	2239	0.929	2.4	0.0	0.0
Muir Construction	5.570	5906	3948	1.496	0.0	5.2	-
Industry Totals	5.739	499716	367088	1.601	0.9	29.7	0.8

BUILDING CONTRACTORS (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Construction PLC	4111	108653	3.784	12.107	2755	39.438
B. & J. Aitken	122	5774	2.113	34.970	122	47.328
W. & J. Barr & Sons	765	20827	3.673	30.039	366	56.904
Barratt	-3889	11299	-34.419	-62.922	755	14.966
Bett Brothers	1071	15915	6.730	3.244	401	39.688
Henry Boot Scotland	321	11518	2.787	-15.976	148	77.824
G.S. Brown (Construction)	463	4282	10.813	-14.120	50	85.640
W.H. Brown (Construction)	267	9391	2.843	-13.295	205	45.810
A.B. Cant	42	3753	1.119	16.916	145	25.883
Chap (Holdings)	320	8804	3.635	18.764	275	32.015
Christie & Co. (Contractors)	23	2449	0.939	12.857	133	18.414
Cala PLC	4385	42388	10.345	50.467	184	230.370
Clachan (Construction)	32	3557	0.900	-10.941	85	41.847
J. Cochrane & Co.	123	3002	4.097	15.506	95	31.600
D.H. Crighton (Contractors)	-214	2273	-9.415	-40.529	6	378.833
Cruden Building	630	25765	2.445	180.024	843	30.563
Dallfied Construction	44	12423	0.354	45.520	299	41.548
J. Dennis & Co.	232	3248	7.143	38.863	73	44.493
J. Dickie & Son	240	5335	4.499	7.517	87	61.322
Doric (Construction) Co.	90	13526	0.665	-3.296	411	32.910
Drake & Scull (Scotland)	235	14555	1.615	12.838	385	37.805
Fairclough Scotland	1039	26218	3.963	-13.691	474	55.312
A. Farquhar	189	11578	1.632	24.481	289	40.062
Firholm	73	15158	0.482	8.535	312	48.583
Forth Valley (Construction)	18	1755	1.026	22.642	48	36.563
Front Line (Construction)	176	2408	7.309	15.492	48	50.167
G.A. Group	773	47063	1.642	10.125	498	94.504
Charles Grey Builders	-56	32069	-0.175	-12.145	853	37.596
Hart Builders	480	13404	3.581	11.533	463	28.950
Hunter (Construction)	161	6849	2.351	32.373	166	41.259
Lafferty Construction	-131	16555	-0.791	1.996	592	27.965
J. Lawrence	1067	89234	1.196	17.833	1011	88.263
Lawrence (Construction) Co.	-670	21102	-3.175	53.002	169	124.864
Leech Homes (Scotland)	687	16347	4.203	101.442	165	99.073
George Leslie	97	5553	1.747	13.582	148	37.520
F.J.C. Lilley PLC	-5447	331154	-1.645	-7.346	7018	47.186
London & Clydeside Est.	501	15676	3.196	-0.140	224	69.982
Luddon Construction	48	7573	0.634	-16.551	203	37.305
M.D.W. Holdings PLC	2452	64568	3.798	12.103	935	69.057
John McColl Wells	117	2681	4.364	14.280	116	23.112
John G. McGregor	834	5637	14.795	12.763	47	119.936
R.J. McLeod	-7	14052	-0.050	-5.950	340	41.329
Hugh MacRae & Co.	-160	7138	-2.242	-33.551	153	46.654
MacTaggart & Mickel	2777	8133	34.145	-10.103	356	22.846
Melville, Dundas & Whitson	1693	42236	4.008	2.539	563	75.020
Industry Sub-Totals	16124	1132878			23014	

Miller (Construction)	205	88828	0.231	115.534	1129	78.678
Morrison Construction	391	31349	1.247	-35.794	655	47.861
Mowlem (Scotland)	202	16590	1.218	22.535	187	88.717
Murdich MacKenzie	3	713	0.421	9.524	48	14.854
Norwest Holst Scotland	243	12972	1.873	-25.337	148	87.649
Robinson & Davidson	1243	15259	8.146	12.529	605	25.221
Salveson Homes (Scotland)	318	14899	2.134	19.700	180	82.772
J. Smart & Co.	1428	13690	10.431	-5.220	373	36.702
W. & J.R. Watson	-250	10956	-2.282	11.251	424	25.840
Whatlings PLC	1736	35081	4.949	-8.457	590	59.459
George Wilson	-111	7343	-1.512	18.723	246	29.850
Stewart Milne (Const.)	105	11385	0.922	28.615	248	45.907
Muir Construction	245	8271	2.962	-28.520	100	82.710
Industry Totals	21882	1400214	1.563	5.426	27947	50.102

BUILDING CONTRACTORS (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Construction PLC	ABD	225	0.002	24250	0.223	0.225	21080
B. & J. Aitken	GW	1080	0.187	1727	0.299	0.486	714
W. & J. Barr & Sons	AYR	4389	0.211	4202	0.202	0.412	3169
Barratt	ABD	3740	0.331	2752	0.244	0.575	164
Bett Brothers	PTH & KIN	2419	0.152	21392	1.344	1.496	17787
Henry Boot Scotland	GW	1457	0.127	356	0.031	0.157	15
G.S. Brown (Construction)	PTH & KIN	490	0.114	5117	1.195	1.309	681
W.H. Brown (Construction)	PTH & KIN	2467	0.263	948	0.101	0.364	1247
A.B. Cant	FIFE	-	-	-	-	-	-
Chap (Holdings)	ABD	2234	0.254	1298	0.147	0.401	963
Christie & Co. (Contractors)	FIFE	-	-	-	-	-	-
Cala PLC	LTH	2469	0.058	24266	0.572	0.631	1937
Clachan (Construction)	GW	-	-	-	-	-	-
J. Cochrane & Co.	GW	533	0.178	524	0.175	0.352	228
D.H. Crighton (Contractors)	LTH	50	0.022	470	0.207	0.229	1335
Cruden Building	GW	2901	0.113	937	0.036	0.149	493
Dallfied Construction	GW	2427	0.195	1140	0.092	0.287	719
J. Dennis & Co.	STIR	-	-	-	-	-	-
J. Dickie & Son	GW	769	0.144	1152	0.216	0.360	418
Doric (Construction) Co.	ABD	3145	0.233	2477	0.183	0.416	1265
Drake & Scull (Scotland)	GW	3477	0.239	847	0.058	0.297	229
Fairclough Scotland	GW	4607	0.176	1063	0.041	0.216	2487
A. Farquhar	ABD	1831	0.158	1592	0.138	0.296	2173
Firholm	LNK	2924	0.193	1091	0.072	0.265	381
Forth Valley (Construction)	STIR	-	-	-	-	-	-
Front Line (Construction)	GW	620	0.257	655	0.272	0.529	360
G.A. Group	GW	5416	0.115	2247	0.048	0.163	2184
Charles Grey Builders	PTH & KIN	5817	0.181	1416	0.044	0.226	2733
Hart Builders	LTH	4247	0.317	1392	0.104	0.421	521
Hunter (Construction)	ABD	1397	0.204	1411	0.206	0.410	837
Lafferty Construction	GW	5898	0.356	3746	0.226	0.583	2652
J. Lawrence	GW	7096	0.080	20458	0.229	0.309	20498
Lawrence (Construction) Co.	GW	-	-	-	-	-	-
Leech Homes (Scotland)	FLK	-	-	-	-	-	-
George Leslie	GW	1149	0.207	878	0.158	0.365	331
F.J.C. Lilley PLC	GW	79395	0.240	27467	0.083	0.323	38739
London & Clydeside Est.	GW	1989	0.127	7001	0.447	0.573	503
Luddon Construction	GW	2490	0.329	887	0.117	0.446	1271
M.D.W. Holdings PLC	GW	-	-	11716	0.181	-	6871
John McColl Wells	DMF & GAL	-	-	40	0.015	-	169
John G. McGregor	HLAND	1556	0.276	2319	0.411	0.687	545
R.J. McLeod	GW	-	-	-	-	-	-
Hugh MacRae & Co.	HLAND	1492	0.209	1713	0.240	0.449	1110
MacTaggart & Mickel	GW	2922	0.359	26517	3.260	3.620	2588
Melville, Dundas & Whitson	GW	5850	0.139	5883	0.139	0.278	4574
Industry Sub-Totals		170967		213347			143971

Miller (Construction)	LTH	12218	0.138	7778	0.088	0.225	1067
Morrison Construction	HLAND	5632	0.180	1029	0.033	0.212	2454
Mowlem (Scotland)	GW	2042	0.123	28	0.002	0.125	253
Murdich MacKenzie	LNK	308	0.432	-67	-0.094	0.338	85
Norwest Holst Scotland	LTH	1540	0.119	65	0.005	0.124	103
Robinson & Davidson	DMF & GAL	3863	0.253	4786	0.314	0.567	1107
Salveson Homes (Scotland)	LTH	-	-	-	-	-	-
J. Smart & Co.	LTH	3592	0.262	12063	0.881	1.144	7529
W. & J.R. Watson	LTH	3459	0.316	3548	0.324	0.640	1996
Whatlings PLC	GW	5494	0.157	5014	0.143	0.300	2288
George Wilson	LNK	2175	0.296	860	0.117	0.413	658
Stewart Milne (Const.)	ABD	2814	0.247	710	0.062	0.310	752
Muir Construction	FIFE	950	0.115	2226	0.269	0.384	711
Industry Totals		215054	0.200	251387	0.284	0.491	162974

BUILDING CONTRACTORS (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Construction PLC	7.652	16332	13162	1.241	0.4	34.8	0.0
B. & J. Aitken	5.852	2238	1225	1.827	0.2	8.3	0.0
W. & J. Barr & Sons	8.658	4692	3659	1.282	0.1	15.7	0.0
Barratt	0.217	8427	5839	1.443	-	-	-
Bett Brothers	44.357	14294	10689	1.337	0.5	46.1	-
Henry Boot Scotland	0.101	4882	4541	1.075	0.5	0.0	-
G.S. Brown (Construction)	13.620	5433	997	5.449	0.0	0.6	-
W.H. Brown (Construction)	6.083	3004	3303	0.909	-	-	-
A.B. Cant	-	-	-	-	-	-	-
Chap (Holdings)	3.502	1896	1561	1.215	0.2	8.8	0.0
Christie & Co. (Contractors)	-	-	-	-	-	-	-
Cala PLC	10.527	32016	9687	3.305	0.2	16.1	-
Clachan (Construction)	-	-	-	-	-	-	-
J. Cochrane & Co.	2.400	557	261	2.134	0.0	-	-
D.H. Crighton (Contractors)	222.500	1091	1956	0.558	1.3	-	-
Cruden Building	0.585	6780	8925	0.760	0.1	-	-
Dallfied Construction	2.405	2754	2333	1.180	2.4	43.6	-
J. Dennis & Co.	-	-	-	-	-	-	-
J. Dickie & Son	4.805	3390	2646	1.281	1.2	2.4	0.0
Doric (Construction) Co.	3.078	3970	2758	1.439	0.7	37.9	0.0
Drake & Scull (Scotland)	0.595	4206	3588	1.172	1.7	0.0	-
Fairclough Scotland	5.247	4199	5623	0.747	0.2	-	0.0
A. Farquhar	7.519	10486	11067	0.948	-	-	-
Firholm	1.221	3489	2779	1.255	0.7	8.8	-
Forth Valley (Construction)	-	-	-	-	-	-	-
Front Line (Construction)	7.500	915	620	1.476	0.4	-	-
G.A. Group	4.386	13006	13642	0.953	0.9	1.6	-
Charles Grey Builders	3.204	9725	11042	0.881	-	-	-
Hart Builders	1.125	4105	3234	1.269	0.0	0.0	-
Hunter (Construction)	5.042	2067	1493	1.384	0.0	27.8	0.0
Lafferty Construction	4.480	8116	7022	1.156	1.5	-	0.0
J. Lawrence	20.275	21961	22001	0.998	6.2	106.2	-
Lawrence (Construction) Co.	-	-	-	-	-	-	-
Leech Homes (Scotland)	-	-	-	-	-	-	-
George Leslie	2.236	1845	1298	1.421	0.0	0.0	-
F.J.C. Lilley PLC	5.520	106335	117607	0.904	3.0	-	-
London & Clydeside Est.	2.246	16526	10028	1.648	0.8	-	-
Luddon Construction	6.261	2054	2438	0.842	1.2	96.2	-
M.D.W. Holdings PLC	7.349	16834	11989	1.404	0.2	-	-
John McColl Wells	1.457	357	486	0.735	1.3	-	-
John G. McGregor	11.596	8094	6219	1.301	2.4	42.8	-
R.J. McLeod	-	-	-	-	-	-	-
Hugh MacRae & Co.	7.255	3547	2944	1.205	1.6	-	-
MacTaggart & Mickel	7.270	26540	2611	10.165	0.0	-	-
Melville, Dundas & Whitson	8.124	8905	7596	1.172	0.0	0.0	-
Industry Sub-Totals		368736	305707				

Miller (Construction)	0.945	29430	22719	1.295	0.1	-	9.8
Morrison Construction	3.747	7305	8730	0.837	0.1	0.3	0.0
Mowlem (Scotland)	1.353	3547	3772	0.940	-	-	0.0
Murdich MacKenzie	1.771	142	294	0.483	0.7	-	-
Norwest Holst Scotland	0.696	4941	4979	0.992	120.5	30.6	0.0
Robinson & Davidson	1.830	6129	2450	2.502	0.3	-	-
Salveson Homes (Scotland)	-	-	-	-	-	-	-
J. Smart & Co.	20.185	6879	2345	2.933	0.0	0.3	-
W. & J.R. Watson	4.708	3002	1450	2.070	0.2	-	0.6
Whatlings PLC	3.878	18521	15795	1.173	1.2	22.2	-
George Wilson	2.675	3909	3707	1.054	-	52.9	-
Stewart Milne (Const.)	3.032	2031	2073	0.980	-	0.0	0.0
Muir Construction	7.110	5856	4341	1.349	0.3	36.2	-
Industry Totals	10.371	460428	378362	1.553	3.7	22.9	0.7

BUILDING CONTRACTORS (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Construction PLC	3458	107444	3.218	-1.113	2721	39.487
B. & J. Aitken	216	7686	2.810	33.114	188	40.883
W. & J. Barr & Sons	1564	23939	6.533	14.942	376	63.668
Barratt	-7859	23146	-33.954	104.850	818	28.296
Bett Brothers	1521	19770	7.693	24.222	476	41.534
Henry Boot Scotland	484	15429	3.137	33.956	143	107.895
G.S. Brown (Construction)	526	4557	11.543	6.422	49	93.000
W.H. Brown (Construction)	313	10347	3.025	10.180	218	47.463
A.B. Cant	86	4002	2.149	6.635	159	25.170
Chap (Holdings)	131	10691	1.225	21.433	298	35.876
Christie & Co. (Contractors)	30	2617	1.146	6.860	132	19.826
Cala PLC	6856	58150	11.790	37.185	232	250.647
Clachan (Construction)	42	3315	1.267	-6.803	79	41.962
J. Cochrane & Co.	135	3434	3.931	14.390	118	29.102
D.H. Crighton (Contractors)	-53	1878	-2.822	-17.378	6	313.000
Cruden Building	278	34375	0.809	33.417	888	38.711
Dallfied Construction	211	11214	1.882	-9.732	310	36.174
J. Dennis & Co.	245	3886	6.305	19.643	83	46.819
J. Dickie & Son	327	9464	3.455	77.395	118	80.203
Doric (Construction) Co.	-784	7967	-9.841	-41.099	293	27.191
Drake & Scull (Scotland)	400	17170	2.330	17.966	417	41.175
Fairclough Scotland	683	32168	2.123	22.694	553	58.170
A. Farquhar	45	9800	0.459	-15.357	276	35.507
Firholm	109	17597	0.619	16.091	362	48.610
Forth Valley (Construction)	32	2071	1.545	18.006	49	42.265
Front Line (Construction)	638	3479	18.339	44.477	53	65.642
G.A. Group	1027	68831	1.492	46.253	562	122.475
Charles Grey Builders	184	32294	0.570	0.702	747	43.232
Hart Builders	1148	20379	5.633	52.037	595	34.250
Hunter (Construction)	79	6144	1.286	-10.293	157	39.134
Lafferty Construction	0	12229	0.000	-26.131	455	26.877
J. Lawrence	903	86732	1.041	-2.804	1045	82.997
Lawrence (Construction) Co.	-232	14900	-1.557	-29.391	130	114.615
Leech Homes (Scotland)	696	15677	4.440	-4.099	177	88.571
George Leslie	166	5908	2.810	6.393	167	35.377
F.J.C. Lilley PLC	2204	249749	0.882	-24.582	4585	54.471
London & Clydeside Est.	687	16938	4.056	8.051	222	76.297
Luddon Construction	67	8088	0.828	6.800	218	37.101
M.D.W. Holdings PLC	2977	70112	4.246	8.586	1010	69.418
John McColl Wells	109	2777	3.925	3.581	122	22.762
John G. McGregor	728	8351	8.718	48.146	52	160.596
R.J. McLeod	-612	20832	-2.938	48.249	302	68.980
Hugh MacRae & Co.	80	7057	1.134	-1.135	115	61.365
MacTaggart & Mickel	1383	9016	15.339	10.857	430	20.967
Melville, Dundas & Whitson	1371	44780	3.062	6.023	598	74.883
Industry Sub-Totals	22599	1146390			21104	

Miller (Construction)	-1796	121084	-1.483	36.313	1178	102.788
Morrison Construction	493	39740	1.241	26.766	657	60.487
Mowlem (Scotland)	-257	17603	-1.460	6.106	242	72.740
Murdich MacKenzie	50	1194	4.188	67.461	48	24.875
Norwest Holst Scotland	726	15864	4.576	22.294	152	104.368
Robinson & Davidson	1585	18017	8.797	18.075	680	26.496
Salveson Homes (Scotland)	198	13879	1.427	-6.846	186	74.618
J. Smart & Co.	2011	11986	16.778	-12.447	439	27.303
W. & J.R. Watson	337	5498	6.130	-49.817	127	43.291
Whatlings PLC	-523	47033	-1.112	34.070	649	72.470
George Wilson	-52	4997	-1.041	-31.949	50	99.940
Stewart Milne (Const.)	319	9758	3.269	-14.291	250	39.032
Muir Construction	261	10392	2.512	25.644	114	91.158
Industry Totals	25951	1463435	1.773	4.515	25876	56.556

BUILDING CONTRACTORS (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Construction PLC	ABD	16526	0.154	48622	0.453	0.606	46641
B. & J. Aitken	GW	1525	0.198	1837	0.239	0.437	834
W. & J. Barr & Sons	AYR	3478	0.145	3865	0.161	0.307	3694
Barratt	ABD	4454	0.192	2329	0.101	0.293	244
Bett Brothers	PTH & KIN	2965	0.150	22230	1.124	1.274	19872
Henry Boot Scotland	GW	2064	0.134	227	0.015	0.148	56
G.S. Brown (Construction)	PTH & KIN	502	0.110	5451	1.196	1.306	695
W.H. Brown (Construction)	PTH & KIN	1917	0.185	667	0.064	0.250	622
A.B. Cant	FIFE	-	-	-	-	-	-
Chap (Holdings)	ABD	2614	0.245	5365	0.502	0.746	1027
Christie & Co. (Contractors)	FIFE	-	-	-	-	-	-
Cala PLC	LTH	3809	0.066	36881	0.634	0.700	1899
Clachan (Construction)	GW	-	-	-	-	-	-
J. Cochrane & Co.	GW	665	0.194	368	0.107	0.301	178
D.H. Crighton (Contractors)	LTH	115	0.061	533	0.284	0.345	1300
Cruden Building	GW	3433	0.100	762	0.022	0.122	450
Dallfied Construction	GW	2714	0.242	1111	0.099	0.341	755
J. Dennis & Co.	STIR	-	-	-	-	-	-
J. Dickie & Son	GW	1116	0.118	1337	0.141	0.259	392
Doric (Construction) Co.	ABD	3500	0.439	2138	0.268	0.708	1236
Drake & Scull (Scotland)	GW	3390	0.197	1360	0.079	0.277	209
Fairclough Scotland	GW	4776	0.148	1083	0.034	0.182	2870
A. Farquhar	ABD	2088	0.213	2953	0.301	0.514	2067
Firholm	LNK	2256	0.128	939	0.053	0.182	295
Forth Valley (Construction)	STIR	-	-	-	-	-	-
Front Line (Construction)	GW	829	0.238	1046	0.301	0.539	447
G.A. Group	GW	5448	0.079	2395	0.035	0.114	1964
Charles Grey Builders	PTH & KIN	8923	0.276	4193	0.130	0.406	3690
Hart Builders	LTH	5634	0.276	1573	0.077	0.354	782
Hunter (Construction)	ABD	1231	0.200	1370	0.223	0.423	887
Lafferty Construction	GW	7183	0.587	3366	0.275	0.863	2712
J. Lawrence	GW	7071	0.082	21143	0.244	0.325	21212
Lawrence (Construction) Co.	GW	-	-	-	-	-	-
Leech Homes (Scotland)	FLK	-	-	-	-	-	-
George Leslie	GW	1395	0.236	944	0.160	0.396	390
F.J.C. Lilley PLC	GW	48734	0.195	24170	0.097	0.292	26647
London & Clydeside Est.	GW	1260	0.074	5167	0.305	0.379	412
Luddon Construction	GW	2094	0.259	1006	0.124	0.383	1467
M.D.W. Holdings PLC	GW	-	-	6145	0.088	-	7756
John McColl Wells	DMF & GAL	-	-	159	0.057	-	171
John G. McGregor	HLAND	1717	0.206	2008	0.240	0.446	458
R.J. McLeod	GW	-	-	-	-	-	-
Hugh MacRae & Co.	HLAND	2085	0.295	2438	0.346	0.641	1576
MacTaggart & Mickel	GW	2894	0.321	22444	2.489	2.810	2335
Melville, Dundas & Whitson	GW	4854	0.108	5264	0.118	0.226	4036
Industry Sub-Totals		165259		244887			162277

Miller (Construction)	LTH	7468	0.062	6873	0.057	0.118	415
Morrison Construction	HLAND	5953	0.150	1149	0.029	0.179	2229
Mowlem (Scotland)	GW	1463	0.083	144	0.008	0.091	204
Murdich MacKenzie	LNK	1301	1.090	821	0.687	1.777	390
Norwest Holst Scotland	LTH	1737	0.110	176	0.011	0.121	255
Robinson & Davidson	DMF & GAL	4675	0.259	4361	0.242	0.502	1438
Salveson Homes (Scotland)	LTH	-	-	-	-	-	-
J. Smart & Co.	LTH	4489	0.375	15023	1.253	1.628	8762
W. & J.R. Watson	LTH	3681	0.670	3902	0.710	1.379	1863
Whatlings PLC	GW	4695	0.100	3590	0.076	0.176	1474
George Wilson	LNK	541	0.108	1071	0.214	0.323	1079
Stewart Milne (Const.)	ABD	3144	0.322	916	0.094	0.416	923
Muir Construction	FIFE	1109	0.107	2415	0.232	0.339	764
Industry Totals		205517	0.219	285329	0.302	0.531	182073

BUILDING CONTRACTORS (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Construction PLC	17.141	27453	25473	1.078	-	-	-
B. & J. Aitken	4.436	2489	1486	1.675	-	-	-
W. & J. Barr & Sons	9.826	4399	4229	1.040	-	-	-
Barratt	0.299	14968	12883	1.162	-	-	-
Bett Brothers	41.748	17738	15380	1.153	-	-	-
Henry Boot Scotland	0.393	4217	4047	1.042	-	-	-
G.S. Brown (Construction)	14.184	5637	881	6.398	-	-	-
W.H. Brown (Construction)	2.851	2034	2163	0.941	-	-	-
A.B. Cant	-	-	-	-	-	-	-
Chap (Holdings)	3.446	2380	2000	1.190	-	-	-
Christie & Co. (Contractors)	-	-	-	-	-	-	-
Cala PLC	8.185	50661	15679	3.231	-	-	-
Clachan (Construction)	-	-	-	-	-	-	-
J Cochrane & Co.	1.505	431	240	1.794	-	-	-
D.H Crighton (Contractors)	216.733	608	1375	0.442	-	-	-
Cruden Building	0.507	2737	2425	1.129	-	-	-
Dallfied Construction	2.435	2896	2540	1.140	-	-	-
J Dennis & Co.	-	-	-	-	-	-	-
J. Dickie & Son	3.322	2954	2009	1.470	-	-	-
Doric (Construction) Co.	4.218	3558	2456	1.449	-	-	-
Drake & Scull (Scotland)	0.500	4213	3072	1.371	-	-	-
Fairclough Scotland	5.189	3711	5497	0.675	-	-	-
A. Farquhar	7.488	9041	8154	1.109	-	-	-
Firholm	0.815	2592	1949	1.330	-	-	-
Forth Valley (Construction)	-	-	-	-	-	-	-
Front Line (Construction)	8.434	1638	1039	1.577	-	-	-
G.A. Group	3.495	12209	12065	1.012	-	-	-
Charles Grey Builders	4.940	11925	11423	1.044	-	-	-
Hart Builders	1.314	6785	5994	1.132	-	-	-
Hunter (Construction)	5.647	1966	1483	1.326	-	-	-
Lafferty Construction	5.960	6889	6235	1.105	-	-	-
J. Lawrence	20.299	20751	20821	0.997	-	-	-
Lawrence (Construction) Co.	-	-	-	-	-	-	-
Leech Homes (Scotland)	-	-	-	-	-	-	-
George Leslie	2.335	2359	1805	1.307	-	-	-
F.J.C. Lilley PLC	5.812	62274	64751	0.962	-	-	-
London & Clydeside Est.	1.857	12038	7275	1.655	-	-	-
Luddon Construction	6.728	1679	2124	0.790	-	-	-
M.D.W. Holdings PLC	7.679	15970	11004	1.451	-	-	-
John McColl Wells	1.405	473	364	1.299	-	-	-
John G. McGregor	8.800	6830	5060	1.350	-	-	-
R.J. McLeod	-	-	-	-	-	-	-
Hugh MacRae & Co.	13.704	5102	4128	1.236	-	-	-
MacTaggart & Mickel	5.429	21860	1749	12.497	-	-	-
Melville, Dundas & Whitson	6.750	8049	6822	1.180	-	-	-
Industry Sub-Totals		363513	278080				

Miller (Construction)	0.352	20420	13960	1.463	-	-	-
Morrison Construction	3.393	12273	13353	0.919	-	-	-
Mowlem (Scotland)	0.843	2338	2398	0.975	-	-	-
Murdich MacKenzie	8.121	1944	1513	1.285	-	-	-
Norwest Holst Scotland	1.676	3890	3989	0.975	-	-	-
Robinson & Davidson	2.115	6516	3593	1.814	-	-	-
Salveson Homes (Scotland)	-	-	-	-	-	-	-
J. Smart & Co.	19.959	9164	2903	3.157	-	-	-
W. & J.R. Watson	14.672	3938	1899	2.074	-	-	-
Whatlings PLC	2.271	13206	11089	1.191	-	-	-
George Wilson	21.580	3499	3507	0.998	-	-	-
Stewart Milne (Const.)	3.692	2831	2838	0.998	-	-	-
Muir Construction	6.702	6086	4435	1.372	-	-	-
Industry Totals	11.045	449618	343557	1.632	-	-	-

APPENDIX 3 : Builders' Merchants

Firm Data (1983-88)

Contents :

- Profit
- Turnover
- Profit-Sales Ratio (PSR %)
- Annual Sales Growth (Sales %)
- Number of Employees (Emp.)
- Average Revenue Product (ARP)
- Location Code
- Wage Bill
- Input-Output Ratio for Labour
- Capital Employed
- Input Output Ratio for Capital
- Input Output Ratio (Total)
- Fixed Assets (Fx. Ass.)
- Fixed Assets per Employee (FA/L)
- Current Assets
- Current Liabilities
- Current Ratio (CR)
- Borrowing Ratio (Borrow)
- Income Gearing (Inc. Gr.)
- Export Ratio (XR)

BUILDERS' MERCHANTS (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
B.J.K. Aitken	155	5098	3.040	126	40.460
W. Arnott & Son	-66	4080	-1.618	35	116.571
Bon Accord Builders Services	107	4062	2.634	23	176.609
Briggs Amasco	6169	73768	8.363	1818	40.576
Fin-Cairn Holdings	50	5375	0.930	166	32.380
A.M. Goldie & Co.	67	2088	3.209	23	90.783
J. & W. Henderson	222	38677	0.574	443	87.307
Johnstons & Paton	608	22051	2.757	198	111.369
J. & J. Lawrence	168	3896	4.312	46	84.696
McCreath Taylor & Co.	210	10932	1.921	70	156.171
Monteith Building Services	150	16365	0.917	205	79.829
Rembrand	2	5065	0.039	23	220.217
Alexander Russell PLC	1822	23732	7.677	304	78.066
Russlite (Scotland)	49	3851	1.272	49	78.592
Turriff Building Services	6	2244	0.267	25	89.760
William Wilson & Co.	982	23653	4.152	338	69.979
The Builders' Supply Co.	22	582	3.780	9	64.667
Munro Brothers	18	2731	0.659	76	35.934
Webster & Patullo	49	1891	2.591	55	34.382
Bidbrook	25	1975	1.266	18	109.722
James N. Connell	35	487	7.187	15	32.467
Jack's the Builders' Merchant	28	727	3.851	7	103.857
Kenneth Building Services	19	455	4.176	15	30.333
Keyline Builders' Merchants	278	22783	1.220	294	77.493
D. McNair	8	1531	0.523	10	153.100
Parkhead Building Supplies	29	557	5.206	6	92.833
Vandess	180	1802	9.989	19	94.842
Industry Totals	11392	280458	4.062	4416	63.510

BUILDERS' MERCHANTS (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
B.J.K. Aitken	GW	955	0.187	1237	0.243	0.430	1112
W. Arnott & Son	GW	-	-	145	0.036	-	0
Bon Accord Builders Services	ABD	129	0.032	402	0.099	0.131	292
Briggs Amasco	LTH	12856	0.174	12584	0.171	0.345	8059
Fin-Cairn Holdings	LNK	1297	0.241	1296	0.241	0.482	1434
A.M. Goldie & Co.	LNK	127	0.061	316	0.151	0.212	290
J. & W. Henderson	GW	2230	0.058	7584	0.196	0.254	3905
Johnstons & Paton	GW	1384	0.063	3829	0.174	0.236	1851
J. & J. Lawrence	LTH	261	0.067	810	0.208	0.275	839
McCreath Taylor & Co.	GW	333	0.030	1177	0.108	0.138	269
Monteith Building Services	GW	958	0.059	3287	0.201	0.259	1126
Rembrand	PTH & KIN	102	0.020	298	0.059	0.079	230
Alexander Russell PLC	GW	2329	0.098	11709	0.493	0.592	11316
Russlite (Scotland)	GW	362	0.094	1724	0.448	0.542	1183
Turriff Building Services	ABD	-	-	180	0.080	-	103
William Wilson & Co.	ABD	1792	0.076	7224	0.305	0.381	2920
The Builders' Supply Co.	LTH	-	-	-	-	-	-
Munro Brothers	HLAND	-	-	-	-	-	-
Webster & Patullo	PTH & KIN	-	-	-	-	-	-
Bidbrook	LNK	-	-	-	-	-	-
James N. Connell	-	-	-	-	-	-	-
Jack's the Builders' Merchant	GW	-	-	-	-	-	-
Kenneth Building Services	AYR	-	-	-	-	-	-
Keyline Builders' Merchants	GW	-	-	-	-	-	-
D. McNair	-	-	-	-	-	-	-
Parkhead Building Supplies	-	-	-	-	-	-	-
Vandess	-	-	-	-	-	-	-
Industry Totals		25115	0.090	53802	0.201	0.311	34929

BUILDERS' MERCHANTS (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.
B.J.K. Aitken	8.825	1295	1170	1.107	0.4	10.9
W. Arnott & Son	0.000	1024	879	1.165	-	-
Bon Accord Builders Services	12.696	848	738	1.149	1.0	-
Briggs Amasco	4.433	23616	19091	1.237	1.9	0.0
Fin-Cairn Holdings	8.639	1531	1669	0.917	0.7	41.9
A.M. Goldie & Co.	12.609	469	443	1.059	0.3	10.7
J. & W. Henderson	8.815	9798	6119	1.601	0.3	38.7
Johnstons & Paton	9.348	6584	4606	1.429	2.4	25.9
J. & J. Lawrence	18.239	1029	1058	0.973	1.3	16.0
McCreath Taylor & Co.	3.843	2741	1833	1.495	0.5	0.0
Monteith Building Services	5.493	5314	3143	1.691	1.8	21.5
Rembrand	10.000	1142	1074	1.063	0.8	84.6
Alexander Russell PLC	37.224	6993	6600	1.060	0.9	29.4
Russlite (Scotland)	24.143	2105	1564	1.346	0.6	18.3
Turriff Building Services	4.120	483	406	1.190	0.9	14.3
William Wilson & Co.	8.639	10346	6042	1.712	0.6	29.2
The Builders' Supply Co.	-	-	-	-	-	-
Munro Brothers	-	-	-	-	-	-
Webster & Patullo	-	-	-	-	-	-
Bidbrook	-	-	-	-	-	-
James N. Connell	-	-	-	-	-	-
Jack's the Builders' Merchant	-	-	-	-	-	-
Kenneth Building Services	-	-	-	-	-	-
Keyline Builders' Merchants	-	-	-	-	-	-
D. McNair	-	-	-	-	-	-
Parkhead Building Supplies	-	-	-	-	-	-
Vandess	-	-	-	-	-	-
Industry Totals	11.067	72151	53648	1.262	1.0	24.4

BUILDERS' MERCHANTS (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
B.J.K. Aitken	62	6065	1.022	18.968	155	39.129
W. Arnott & Son	-46	4042	-1.138	-0.931	35	115.486
Bon Accord Builders Services	77	4131	1.864	1.699	23	179.609
Briggs Amasco	4826	85648	5.635	16.105	2004	42.739
Fin-Cairn Holdings	145	6678	2.171	24.242	202	33.059
A.M. Goldie & Co.	67	2603	2.574	24.665	24	108.458
J. & W. Henderson	674	44596	1.511	15.304	490	91.012
Johnstons & Paton	691	24313	2.842	10.258	261	93.153
J. & J. Lawrence	304	4753	6.396	21.997	58	81.948
McCreath Taylor & Co.	316	10281	3.074	-5.955	65	158.169
Monteith Building Services	252	20006	1.260	22.249	224	89.313
Rembrand	30	5231	0.574	3.277	29	180.379
Alexander Russell PLC	2020	25374	7.961	6.919	308	82.383
Russlite (Scotland)	493	4037	12.212	4.830	49	82.388
Turriff Building Services	40	2596	1.541	15.686	25	103.840
William Wilson & Co.	1130	26319	4.293	11.271	344	76.509
The Builders' Supply Co.	35	674	5.193	15.808	10	67.400
Munro Brothers	-19	2534	-0.750	-7.213	73	34.712
Webster & Patullo	95	2278	4.170	20.465	65	35.046
Bidbrook	23	2087	1.102	5.671	19	109.842
James N. Connell	34	545	6.239	11.910	17	32.059
Jack's the Builders' Merchant	29	855	3.392	17.607	8	106.875
Kenneth Building Services	34	569	5.975	25.055	16	35.563
Keyline Builders' Merchants	318	25829	1.231	13.370	317	81.479
D. McNair	29	1623	1.787	6.009	10	162.300
Parkhead Building Supplies	46	1459	3.153	161.939	10	145.900
Vandess	155	2021	7.669	12.153	20	101.050
Industry Totals	11860	317147	3.740	13.082	4861	65.243

BUILDERS' MERCHANTS (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
B.J.K. Aitken	GW	1237	0.204	1264	0.208	0.412	753
W. Arnott & Son	GW	-	-	99	0.024	-	0
Bon Accord Builders Services	ABD	139	0.034	426	0.103	0.137	765
Briggs Amasco	LTH	15148	0.177	17144	0.200	0.377	10576
Fin-Cairn Holdings	LNK	1653	0.248	1533	0.230	0.477	1596
A.M. Goldie & Co.	LNK	149	0.057	324	0.124	0.182	287
J. & W. Henderson	GW	3031	0.068	8042	0.180	0.248	4239
Johnstons & Paton	GW	1768	0.073	4959	0.204	0.277	2896
J. & J. Lawrence	LTH	316	0.066	1194	0.251	0.318	1451
McCreath Taylor & Co.	GW	379	0.037	1365	0.133	0.170	230
Monteith Building Services	GW	1161	0.058	3539	0.177	0.235	1242
Rembrand	PTH & KIN	213	0.041	332	0.063	0.104	249
Alexander Russell PLC	GW	2486	0.098	12803	0.505	0.603	13258
Russlite (Scotland)	GW	378	0.094	1595	0.395	0.489	1135
Turriff Building Services	ABD	-	-	209	0.081	-	98
William Wilson & Co.	ABD	2039	0.077	7293	0.277	0.355	2927
The Builders' Supply Co.	LTH	-	-	-	-	-	-
Munro Brothers	HLAND	-	-	-	-	-	-
Webster & Patullo	PTH & KIN	-	-	-	-	-	-
Bidbrook	LNK	-	-	-	-	-	-
James N. Connell	-	-	-	-	-	-	-
Jack's the Builders' Merchant	GW	-	-	-	-	-	-
Kenneth Building Services	AYR	-	-	-	-	-	-
Keyline Builders' Merchants	GW	-	-	-	-	-	-
D. McNair	-	-	-	-	-	-	-
Parkhead Building Supplies	-	-	-	-	-	-	-
Vandess	-	-	-	-	-	-	-
Industry Totals		30097	0.095	62121	0.197	0.313	41702

BUILDERS' MERCHANTS (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Sales (%)	Emp.	Inc. Gr.
B.J.K. Aitken	4.858	1838	1327	1.385	0.3	40.4
W. Arnott & Son	0.000	1031	932	1.106	-	-
Bon Accord Builders Services	33.261	860	1199	0.717	2.0	-
Briggs Amasco	5.277	28119	21551	1.305	2.5	0.1
Fin-Cairn Holdings	7.901	1726	1789	0.965	0.7	28.2
A.M. Goldie & Co.	11.958	442	405	1.091	0.4	8.2
J. & W. Henderson	8.651	11031	7228	1.526	0.4	22.4
Johnstons & Paton	11.096	7569	5506	1.375	3.2	28.3
J. & J. Lawrence	25.017	2208	2465	0.896	2.8	23.4
McCreath Taylor & Co.	3.538	2537	1402	1.810	0.4	0.0
Monteith Building Services	5.545	5457	3160	1.727	1.6	18.4
Rembrand	8.586	1117	1034	1.080	0.8	37.5
Alexander Russell PLC	43.045	8058	8513	0.947	0.7	27.4
Russlite (Scotland)	23.163	1939	1479	1.311	0.2	2.2
Turriff Building Services	3.920	508	397	1.280	0.8	0.0
William Wilson & Co.	8.509	9746	5380	1.812	0.5	23.2
The Builders' Supply Co.	-	-	-	-	-	-
Munro Brothers	-	-	-	-	-	-
Webster & Patullo	-	-	-	-	-	-
Bidbrook	-	-	-	-	-	-
James N. Connell	-	-	-	-	-	-
Jack's the Builders' Merchant	-	-	-	-	-	-
Kenneth Building Services	-	-	-	-	-	-
Keyline Builders' Merchants	-	-	-	-	-	-
D. McNair	-	-	-	-	-	-
Parkhead Building Supplies	-	-	-	-	-	-
Vandess	-	-	-	-	-	-
Industry Totals	12.770	84186	63767	1.271	1.2	18.6

BUILDERS' MERCHANTS (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
B.J.K. Aitken	142	7233	1.963	19.258	124	58.331
W. Arnott & Son	12	4255	0.282	5.270	34	125.147
Bon Accord Builders Services	137	5060	2.708	22.489	24	210.833
Briggs Amasco	7143	95166	7.506	11.113	2031	46.857
Fin-Cairn Holdings	257	8146	3.155	21.983	235	34.664
A.M. Goldie & Co.	-32	2514	-1.273	-3.419	24	104.750
J. & W. Henderson	479	36480	1.313	-18.199	428	85.234
Johnstons & Paton	707	23781	2.973	-2.188	255	93.259
J. & J. Lawrence	546	4199	13.003	-11.656	37	113.486
McCreath Taylor & Co.	191	10080	1.895	-1.955	62	162.581
Monteith Building Services	318	22891	1.389	14.421	237	96.586
Rembrand	37	5261	0.703	0.574	33	159.424
Alexander Russell PLC	956	22322	4.283	-12.028	323	69.108
Russlite (Scotland)	162	3497	4.633	-13.376	44	79.477
Turriff Building Services	44	2865	1.536	10.362	28	102.321
William Wilson & Co.	368	25696	1.432	-2.367	360	71.378
The Builders' Supply Co.	41	789	5.196	17.062	11	71.727
Munro Brothers	-77	2379	-3.237	-6.117	69	34.478
Webster & Patullo	128	2549	5.022	11.896	68	37.485
Bidbrook	26	2481	1.048	18.879	21	118.143
James N. Connell	40	612	6.536	12.294	20	30.600
Jack's the Builders' Merchant	10	918	1.089	7.368	8	114.750
Kenneth Building Services	41	686	5.977	20.562	16	42.875
Keyline Builders' Merchants	339	30447	1.113	17.879	337	90.347
D. McNair	57	1835	3.106	13.062	12	152.917
Parkhead Building Supplies	45	1752	2.568	20.082	11	159.273
Vandess	178	2381	7.476	17.813	21	113.381
Industry Totals	12295	326275	3.768	2.878	4873	66.956

BUILDERS' MERCHANTS (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
B.J.K. Aitken	GW	1029	0.142	1530	0.212	0.354	764
W. Arnott & Son	GW	-	-	-	-	-	0
Bon Accord Builders Services	ABD	159	0.031	500	0.099	0.130	759
Briggs Amasco	LTH	16128	0.169	18553	0.195	0.364	14266
Fin-Cairn Holdings	LNK	2091	0.257	1944	0.239	0.495	1978
A.M. Goldie & Co.	LNK	152	0.060	373	0.148	0.209	278
J. & W. Henderson	GW	2784	0.076	8035	0.220	0.297	4166
Johnstons & Paton	GW	1959	0.082	4988	0.210	0.292	3014
J. & J. Lawrence	LTH	263	0.063	1277	0.304	0.367	1473
McCreath Taylor & Co.	GW	396	0.039	1370	0.136	0.175	265
Monteith Building Services	GW	1472	0.064	3765	0.164	0.229	1308
Rembrand	PTH & KIN	209	0.040	364	0.069	0.109	285
Alexander Russell PLC	GW	2751	0.123	11899	0.533	0.656	16704
Russlite (Scotland)	GW	361	0.103	1624	0.464	0.568	1122
Turriff Building Services	ABD	-	-	240	0.084	-	100
William Wilson & Co.	ABD	2296	0.089	6716	0.261	0.351	3027
The Builders' Supply Co.	LTH	-	-	-	-	-	-
Munro Brothers	HLAND	-	-	-	-	-	-
Webster & Patullo	PTH & KIN	520	0.204	824	0.323	0.527	427
Bidbrook	LNK	-	-	-	-	-	-
James N. Connell	-	-	-	-	-	-	-
Jack's the Builders' Merchant	GW	-	-	-	-	-	-
Kenneth Building Services	AYR	164	0.239	503	0.733	0.972	114
Keyline Builders' Merchants	GW	2784	0.091	8035	0.264	0.355	4082
D. McNair	-	-	-	-	-	-	-
Parkhead Building Supplies	-	-	-	-	-	-	-
Vandess	-	-	-	-	-	-	-
Industry Totals		35518	0.110	72540	0.259	0.379	54132

BUILDERS' MERCHANTS (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.
B.J.K. Aitken	6.161	1472	625	2.355	0.1	2.7
W. Arnott & Son	0.000	1034	965	1.072	-	-
Bon Accord Builders Services	31.625	1176	1435	0.820	1.8	-
Briggs Amasco	7.024	26210	21444	1.222	5.7	0.0
Fin-Cairn Holdings	8.417	2162	2196	0.985	1.0	21.6
A.M. Goldie & Co.	11.583	647	552	1.172	-	-
J. & W. Henderson	9.734	8188	4319	1.896	0.2	33.4
Johnstons & Paton	11.820	7369	5485	1.343	-	-
J. & J. Lawrence	39.811	2245	2441	0.920	1.5	22.6
McCreath Taylor & Co.	4.274	2720	1615	1.684	0.4	0.0
Monteith Building Services	5.519	5476	3154	1.736	-	-
Rembrand	8.636	1243	1164	1.068	0.8	33.9
Alexander Russell PLC	51.715	9730	14535	0.669	1.8	53.3
Russlite (Scotland)	25.500	1832	1330	1.377	0.5	22.9
Turriff Building Services	3.571	532	409	1.301	-	-
William Wilson & Co.	8.408	9874	6185	1.596	0.6	42.5
The Builders' Supply Co.	-	-	-	-	-	-
Munro Brothers	-	-	-	-	-	-
Webster & Patullo	6.279	921	524	1.758	-	-
Bidbrook	-	-	-	-	-	-
James N. Connell	-	-	-	-	-	-
Jack's the Builders' Merchant	-	-	-	-	-	-
Kenneth Building Services	7.125	525	136	3.860	-	-
Keyline Builders' Merchants	12.113	8272	4319	1.915	-	-
D. McNair	-	-	-	-	-	-
Parkhead Building Supplies	-	-	-	-	-	-
Vandess	-	-	-	-	-	-
Industry Totals	13.648	91628	72833	1.513	1.3	23.3

BUILDERS' MERCHANTS (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
B.J.K. Aitken	92	4278	2.151	-40.854	97	44.103
W. Arnott & Son	19	4434	0.429	4.207	34	130.412
Bon Accord Builders Services	28	5177	0.541	2.312	29	178.517
Briggs Amasco	6284	87506	7.181	-8.049	2131	41.063
Fin-Cairn Holdings	-3	10240	-0.029	25.706	308	33.247
A.M. Goldie & Co.	25	2439	1.025	-2.983	23	106.043
J. & W. Henderson	513	41518	1.236	13.810	430	96.553
Johnstons & Paton	628	22276	2.819	-6.329	253	88.047
J. & J. Lawrence	431	5131	8.400	22.196	46	111.543
McCreath Taylor & Co.	44	9339	0.471	-7.351	58	161.017
Monteith Building Services	376	24333	1.545	6.299	248	98.117
Rembrand	29	5803	0.500	10.302	30	193.433
Alexander Russell PLC	1853	28932	6.405	29.612	311	93.029
Russlite (Scotland)	23	2644	0.870	-24.392	37	71.459
Turriff Building Services	43	3111	1.382	8.586	31	100.355
William Wilson & Co.	229	24774	0.924	-3.588	345	71.809
The Builders' Supply Co.	28	754	3.714	-4.436	12	62.833
Munro Brothers	-44	1875	-2.347	-21.185	56	33.482
Webster & Patullo	146	2477	5.894	-2.825	73	33.932
Bidbrook	26	2324	1.119	-6.328	21	110.667
James N. Connell	34	628	5.414	2.614	20	31.400
Jack's the Builders' Merchant	14	945	1.481	2.941	8	118.125
Kenneth Building Services	46	571	8.056	-16.764	17	33.588
Keyline Builders' Merchants	218	31055	0.702	1.997	344	90.276
D. McNair	38	1756	2.164	-4.305	12	146.333
Parkhead Building Supplies	61	2241	2.722	27.911	13	172.385
Vandess	194	2390	8.117	0.378	22	108.636
Industry Totals	11375	328951	3.458	0.820	5009	65.672

BUILDERS' MERCHANTS (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
B.J.K. Aitken	GW	858	0.201	1606	0.375	0.576	677
W. Arnott & Son	GW	-	-	-	-	-	-
Bon Accord Builders Services	ABD	177	0.034	565	0.109	0.143	773
Briggs Amasco	LTH	18208	0.208	11264	0.129	0.337	8828
Fin-Cairn Holdings	LNK	2091	0.204	2214	0.216	0.420	997
A.M. Goldie & Co.	LNK	144	0.059	373	0.153	0.212	269
J. & W. Henderson	GW	2995	0.072	9426	0.227	0.299	4317
Johnstons & Paton	GW	2047	0.092	5940	0.267	0.359	2996
J. & J. Lawrence	LTH	300	0.058	1391	0.271	0.330	1347
McCreath Taylor & Co.	GW	353	0.038	1320	0.141	0.179	216
Monteith Building Services	GW	1161	0.048	3260	0.134	0.182	1349
Rembrand	PTH & KIN	235	0.040	376	0.065	0.105	311
Alexander Russell PLC	GW	3075	0.106	18355	0.634	0.741	18205
Russlite (Scotland)	GW	368	0.139	1667	0.630	0.770	1274
Turriff Building Services	ABD	-	-	221	0.071	-	96
William Wilson & Co.	ABD	1832	0.074	5408	0.218	0.292	2921
The Builders' Supply Co.	LTH	92	0.122	31	0.041	0.163	35
Munro Brothers	HLAND	330	0.176	474	0.253	0.429	307
Webster & Patullo	PTH & KIN	553	0.223	897	0.362	0.585	496
Bidbrook	LNK	88	0.038	170	0.073	0.111	90
James N. Connell	-	-	-	-	-	-	-
Jack's the Builders' Merchant	GW	73	0.077	4	0.004	0.081	36
Kenneth Building Services	AYR	175	0.306	542	0.949	1.256	173
Keyline Builders' Merchants	GW	2426	0.078	8191	0.264	0.342	3856
D. McNair	-	-	-	-	-	-	-
Parkhead Building Supplies	-	-	-	-	-	-	-
Vandess	-	-	-	-	-	-	-
Industry Totals		37581	0.114	73695	0.254	0.377	49569

BUILDERS' MERCHANTS (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.
B.J.K. Aitken	6.979	1952	1023	1.908	0.1	5.2
W. Arnott & Son	-	-	-	-	-	-
Bon Accord Builders Services	26.655	1110	1318	0.842	1.5	-
Briggs Amasco	4.143	22645	20209	1.121	1.9	0.0
Fin-Cairn Holdings	3.237	2779	2562	1.085	0.8	101.8
A.M. Goldie & Co.	11.696	656	552	1.188	2.0	-
J. & W. Henderson	10.040	10997	5888	1.868	0.3	29.8
Johnstons & Paton	11.842	7085	4141	1.711	-	-
J. & J. Lawrence	29.283	2273	2229	1.020	1.3	25.9
McCreath Taylor & Co.	3.724	2323	1219	1.906	0.3	2.2
Monteith Building Services	5.440	4964	3053	1.626	-	-
Rembrand	10.367	1151	1086	1.060	0.8	50.0
Alexander Russell PLC	58.537	9085	8935	1.017	0.6	32.9
Russlite (Scotland)	34.432	1609	1216	1.323	0.5	54.3
Turriff Building Services	3.097	520	395	1.316	-	-
William Wilson & Co.	8.467	6554	4067	1.612	0.6	36.6
The Builders' Supply Co.	2.917	195	199	0.980	-	-
Munro Brothers	5.482	967	800	1.209	-	-
Webster & Patullo	6.795	1124	723	1.555	-	-
Bidbrook	4.286	684	604	1.132	-	-
James N. Connell	-	-	-	-	-	-
Jack's the Builders' Merchant	4.500	262	294	0.891	-	-
Kenneth Building Services	10.176	650	281	2.313	-	-
Keyline Builders' Merchants	11.209	8434	4099	2.058	-	-
D. McNair	-	-	-	-	-	-
Parkhead Building Supplies	-	-	-	-	-	-
Vandess	-	-	-	-	-	-
Industry Totals	12.423	88019	64893	1.397	0.9	33.9

BUILDERS' MERCHANTS (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
B.J.K. Aitken	122	5774	2.113	34.970	122	47.328
W. Arnott & Son	-18	4018	-0.448	-9.382	33	121.758
Bon Accord Builders Services	-483	2681	-18.016	-48.213	23	116.565
Briggs Amasco	4609	154354	2.986	76.392	2468	62.542
Fin-Cairn Holdings	283	14229	1.989	38.955	341	41.727
A.M. Goldie & Co.	23	2693	0.854	10.414	19	141.737
J. & W. Henderson	468	40294	1.161	-2.948	432	93.273
Johnstons & Paton	586	25211	2.324	13.176	260	96.965
J. & J. Lawrence	339	4942	6.860	-3.683	43	114.930
McCreath Taylor & Co.	113	9872	1.145	5.707	55	179.491
Monteith Building Services	437	27831	1.570	14.376	279	99.753
Rembrand	45	5184	0.868	-10.667	29	178.759
Alexander Russell PLC	2867	36495	7.856	26.141	441	82.755
Russlite (Scotland)	31	2955	1.049	11.762	34	86.912
Turriff Building Services	51	3097	1.647	-0.450	32	96.781
William Wilson & Co.	153	18096	0.845	-26.956	227	79.718
The Builders' Supply Co.	-85	840	-10.119	11.406	12	70.000
Munro Brothers	-107	2247	-4.762	19.840	61	36.836
Webster & Patullo	210	2797	7.508	12.919	68	41.132
Bidbrook	21	2693	0.780	15.878	21	128.238
James N. Connell	29	571	5.079	-9.076	19	30.053
Jack's the Builders' Merchant	19	1161	1.637	22.857	9	129.000
Kenneth Building Services	-51	719	-7.093	25.919	21	34.238
Keyline Builders' Merchants	697	34357	2.029	10.633	344	99.875
D. McNair	87	2044	4.256	16.401	13	157.231
Parkhead Building Supplies	69	2557	2.698	14.101	13	196.692
Vandess	1433	5331	26.881	123.054	45	118.467
Industry Totals	11948	413043	2.893	25.564	5464	75.594

BUILDERS' MERCHANTS (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
B.J.K. Aitken	GW	1080	0.187	1727	0.299	0.486	714
W. Arnott & Son	GW	-	-	-	-	-	-
Bon Accord Builders Services	ABD	134	0.050	302	0.113	0.163	613
Briggs Amasco	LTH	23523	0.152	30197	0.196	0.348	16110
Fin-Cairn Holdings	LNK	2231	0.157	2377	0.167	0.324	2112
A.M. Goldie & Co.	LNK	132	0.049	359	0.133	0.182	280
J. & W. Henderson	GW	-	-	-	-	-	-
Johnstons & Paton	GW	2248	0.089	6198	0.246	0.335	3442
J. & J. Lawrence	LTH	335	0.068	1348	0.273	0.341	1783
McCreath Taylor & Co.	GW	390	0.040	1349	0.137	0.176	247
Monteith Building Services	GW	930	0.033	3341	0.120	0.153	1022
Rembrand	PTH & KIN	260	0.050	401	0.077	0.128	307
Alexander Russell PLC	GW	4645	0.127	19992	0.548	0.675	20848
Russlite (Scotland)	GW	411	0.139	1601	0.542	0.681	1107
Turriff Building Services	ABD	-	-	-	-	-	-
William Wilson & Co.	ABD	1607	0.089	6426	0.355	0.444	3110
The Builders' Supply Co.	LTH	81	0.096	-25	-0.030	0.067	35
Munro Brothers	HLAND	395	0.176	453	0.202	0.377	322
Webster & Patullo	PTH & KIN	546	0.195	1051	0.376	0.571	492
Bidbrook	LNK	132	0.049	155	0.058	0.107	84
James N. Connell	-	-	-	-	-	-	-
Jack's the Builders' Merchant	GW	72	0.062	15	0.013	0.075	33
Kenneth Building Services	AYR	227	0.316	580	0.807	1.122	188
Keyline Builders' Merchants	GW	2606	0.076	8691	0.253	0.329	3972
D. McNair	-	-	-	-	-	-	-
Parkhead Building Supplies	-	-	-	-	-	-	-
Vandess	-	-	-	-	-	-	-
Industry Totals		41984	0.110	86538	0.244	0.354	56821

BUILDERS' MERCHANTS (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.
B.J.K. Aitken	5.852	2238	1225	1.827	0.2	8.3
W. Arnott & Son	-	-	-	-	-	-
Bon Accord Builders Services	26.652	920	1231	0.747	1.8	-
Briggs Amasco	6.528	39038	24951	1.565	2.6	0.0
Fin-Cairn Holdings	6.194	3356	3091	1.086	0.9	25.7
A.M. Goldie & Co.	14.737	653	574	1.138	-	-
J. & W. Henderson	-	-	-	-	-	-
Johnstons & Paton	13.238	8660	5904	1.467	-	-
J. & J. Lawrence	41.465	2765	3200	0.864	1.8	24.3
McCreath Taylor & Co.	4.491	2594	1492	1.739	0.3	0.0
Monteith Building Services	3.663	4225	1906	2.217	-	-
Rembrand	10.586	1213	1119	1.084	0.6	35.7
Alexander Russell PLC	47.274	13333	14189	0.940	1.0	35.3
Russlite (Scotland)	32.559	1719	1225	1.403	0.6	47.4
Turriff Building Services	-	-	-	-	-	-
William Wilson & Co.	13.700	7763	4447	1.746	0.6	42.0
The Builders' Supply Co.	2.917	226	286	0.790	-	-
Munro Brothers	5.279	1216	1085	1.121	-	-
Webster & Patullo	7.235	1097	538	2.039	-	-
Bidbrook	4.000	696	625	1.114	-	-
James N. Connell	-	-	-	-	-	-
Jack's the Builders' Merchant	3.667	260	278	0.935	-	-
Kenneth Building Services	8.952	724	332	2.181	-	-
Keyline Builders' Merchants	11.547	8779	4060	2.162	-	-
D. McNair	-	-	-	-	-	-
Parkhead Building Supplies	-	-	-	-	-	-
Vandess	-	-	-	-	-	-
Industry Totals	13.527	101475	71758	1.408	1.0	24.3

BUILDERS' MERCHANTS (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
B.J.K. Aitken	216	7686	2.810	33.114	188	40.883
W. Arnott & Son	12	3855	0.311	-4.057	30	128.500
Bon Accord Builders Services	-255	1978	-12.892	-26.222	16	123.625
Briggs Amasco	4731	159831	2.960	3.548	2434	65.666
Fin-Cairn Holdings	254	12946	1.962	-9.017	343	37.743
A.M. Goldie & Co.	44	3056	1.440	13.479	20	152.800
J. & W. Henderson	784	49211	1.593	22.130	467	105.377
Johnstons & Paton	634	28383	2.234	12.582	281	101.007
J. & J. Lawrence	322	4768	6.753	-3.521	45	105.956
McCreath Taylor & Co.	188	10350	1.816	4.842	51	202.941
Monteith Building Services	336	24672	1.362	-11.351	268	92.060
Rembrand	50	6259	0.799	20.737	28	223.536
Alexander Russell PLC	2746	38904	7.058	6.601	426	91.324
Russlite (Scotland)	155	3418	4.535	15.668	40	85.450
Turriff Building Services	48	3332	1.441	7.588	36	92.556
William Wilson & Co.	511	17761	2.877	-1.851	197	90.157
The Builders' Supply Co.	13	1399	0.929	66.548	15	93.267
Munro Brothers	-282	1959	-14.395	-12.817	44	44.523
Webster & Patullo	87	3394	2.563	21.344	75	45.253
Bidbrook	41	3056	1.342	13.479	22	138.909
James N. Connell	43	658	6.535	15.236	21	31.333
Jack's the Builders' Merchant	89	1781	4.997	53.402	11	161.909
Kenneth Building Services	23	740	3.108	2.921	19	38.947
Keyline Builders' Merchants	871	37404	2.329	8.869	362	103.326
D. McNair	54	2744	1.968	34.247	14	196.000
Parkhead Building Supplies	80	2723	2.938	6.492	13	209.462
Vandess	223	5170	4.313	-3.020	45	114.889
Industry Totals	12018	437438	2.747	5.906	5511	79.375

BUILDERS' MERCHANTS (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
B.J.K. Aitken	GW	1525	0.198	1837	0.239	0.437	809
W. Arnott & Son	GW	-	-	-	-	-	-
Bon Accord Builders Services	ABD	148	0.075	439	0.222	0.297	640
Briggs Amasco	LTH	17173	0.107	17948	0.112	0.220	11568
Fin-Cairn Holdings	LNK	3164	0.244	2161	0.167	0.411	2116
A.M. Goldie & Co.	LNK	140	0.046	403	0.132	0.178	302
J. & W. Henderson	GW	-	-	-	-	-	-
Johnstons & Paton	GW	1881	0.066	5183	0.183	0.249	2840
J. & J. Lawrence	LTH	295	0.062	1204	0.253	0.314	1379
McCreath Taylor & Co.	GW	370	0.036	1316	0.127	0.163	243
Monteith Building Services	GW	1136	0.046	3438	0.139	0.185	1209
Rembrand	PTH & KIN	314	0.050	436	0.070	0.120	326
Alexander Russell PLC	GW	5257	0.135	22279	0.573	0.708	20244
Russlite (Scotland)	GW	431	0.126	1574	0.461	0.587	1045
Turriff Building Services	ABD	-	-	-	-	-	-
William Wilson & Co.	ABD	1913	0.108	6613	0.372	0.480	2981
The Builders' Supply Co.	LTH	102	0.073	-21	-0.015	0.058	38
Munro Brothers	HLAND	-	-	-	-	-	-
Webster & Patullo	PTH & KIN	-	-	-	-	-	-
Bidbrook	LNK	140	0.046	197	0.064	0.110	103
James N. Connell	-	-	-	-	-	-	-
Jack's the Builders' Merchant	GW	90	0.051	94	0.053	0.103	45
Kenneth Building Services	AYR	-	-	-	-	-	-
Keyline Builders' Merchants	GW	-	-	-	-	-	-
D. McNair	-	-	-	-	-	-	-
Parkhead Building Supplies	-	-	-	-	-	-	-
Vandess	-	-	-	-	-	-	-
Industry Totals		34079	0.092	65102	0.197	0.289	45888

BUILDERS' MERCHANTS (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.
B.J.K. Aitken	4.303	2514	1486	1.692	-	-
W. Arnott & Son	-	-	-	-	-	-
Bon Accord Builders Services	40.025	983	1184	0.830	-	-
Briggs Amasco	4.753	27926	21449	1.302	-	-
Fin-Cairn Holdings	6.169	3256	3311	0.983	-	-
A.M. Goldie & Co.	15.100	721	620	1.163	-	-
J. & W. Henderson	-	-	-	-	-	-
Johnstons & Paton	10.106	7453	5128	1.453	-	-
J. & J. Lawrence	30.644	2104	2279	0.923	-	-
McCreath Taylor & Co.	4.765	2583	1512	1.708	-	-
Monteith Building Services	4.513	5087	2883	1.764	-	-
Rembrand	11.643	1346	1236	1.089	-	-
Alexander Russell PLC	47.521	13717	11662	1.176	-	-
Russlite (Scotland)	26.125	1501	972	1.544	-	-
Turriff Building Services	-	-	-	-	-	-
William Wilson & Co.	15.132	8857	5224	1.695	-	-
The Builders' Supply Co.	2.533	304	363	0.837	-	-
Munro Brothers	-	-	-	-	-	-
Webster & Patullo	-	-	-	-	-	-
Bidbrook	4.682	763	669	1.141	-	-
James N. Connell	-	-	-	-	-	-
Jack's the Builders' Merchant	4.091	322	273	1.179	-	-
Kenneth Building Services	-	-	-	-	-	-
Keyline Builders' Merchants	-	-	-	-	-	-
D. McNair	-	-	-	-	-	-
Parkhead Building Supplies	-	-	-	-	-	-
Vandess	-	-	-	-	-	-
Industry Totals	14.507	79437	60252	1.280	-	-

APPENDIX 4 : Electronic Components Manufacture

Firm Data (1983-88)

Contents :

Profit
Turnover
Profit-Sales Ratio (PSR %)
Annual Sales Growth (Sales %)
Number of Employees (Emp.)
Average Revenue Product (ARP)
Location Code
Wage Bill
Input-Output Ratio for Labour
Capital Employed
Input Output Ratio for Capital
Input Output Ratio (Total)
Fixed Assets (Fx. Ass.)
Fixed Assets per Employee (FA/L)
Current Assets
Current Liabilities
Current Ratio (CR)
Borrowing Ratio (Borrow)
Income Gearing (Inc. Gr.)
Export Ratio (XR)

ELECTRONIC COMPONENT MANUFACTURE (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
Bepi Circuits	139	5747	2.419	195	29.472
Exacta Circuits	-252	11675	-2.158	489	23.875
Keltek Electronics	-1	4146	-0.024	243	17.062
Beckman International	-712	14598	-4.877	533	27.388
Hughes Microelectronics	1754	17227	10.182	546	31.551
Prestwick Circuits	430	9329	4.609	234	39.868
National Semiconductor	3993	79629	5.015	1266	62.898
Sprague Electric	29	7411	0.391	148	50.074
Ferranti PLC	38800	372200	10.425	18294	20.345
Ashdown Printed Circuits	0	1012	0.000	40	25.300
Highland Electronics	333	5130	6.491	111	46.216
Met-Etch	-22	2817	-0.781	92	30.620
Gentech International	101	1311	7.704	119	11.017
Industry Totals	44592	532232	8.378	22310	23.856

ELECTRONIC COMPONENT MANUFACTURE (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Bepi Circuits	1367	9559	14.301	66.330	242	39.500
Exacta Circuits	-606	16750	-3.618	43.469	586	28.584
Keltek Electronics	52	5515	0.943	33.020	279	19.767
Beckman International	170	11960	1.421	-18.071	565	21.168
Hughes Microelectronics	1553	21458	7.237	24.560	644	33.320
Prestwick Circuits	881	14004	6.291	50.113	322	43.491
National Semiconductor	6429	103513	6.211	29.994	1655	62.546
Sprague Electric	328	13118	2.500	77.007	168	78.083
Ferranti PLC	46000	451700	10.184	21.359	19085	23.668
Ashdown Printed Circuits	-21	1277	-1.644	26.186	40	31.925
Highland Electronics	321	6857	4.681	33.665	139	49.331
Met-Etch	-24	3929	-0.611	39.475	115	34.165
Gentech International	122	1655	7.372	26.240	137	12.080
Industry Totals	56572	661295	8.555	24.249	23977	27.580

ELECTRONIC COMPONENT MANUFACTURE (1983)

Firms	Lctn-Code	Wage Bill	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Bepi Circuits	BDS	1541	0.268	2541	0.442	0.710	1094
Exacta Circuits	BDS	4063	0.348	9979	0.855	1.203	5530
Keltek Electronics	BDS	1203	0.290	970	0.234	0.524	287
Beckman International	FIFE	2848	0.195	-327	-0.022	0.173	991
Hughes Microelectronics	FIFE	4192	0.243	8058	0.468	0.711	5063
Prestwick Circuits	AYR	1916	0.205	4895	0.525	0.730	4520
National Semiconductor	GW	11002	0.138	29606	0.372	0.510	17627
Sprague Electric	BDS	966	0.130	1736	0.234	0.365	1245
Ferranti PLC	PTH & KIN	140000	0.376	143000	0.384	0.760	75800
Ashdown Printed Circuits	LTH	-	-	-	-	-	-
Highland Electronics	HLAND	-	-	-	-	-	-
Met-Etch	BDS	-	-	-	-	-	-
Gentech International	-	-	-	-	-	-	-
Industry Totals		167731	0.244	200458	0.388	0.632	112157

ELECTRONIC COMPONENT MANUFACTURE (1984)

Firms	Lctn-Code	Wage Bill	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Bepi Circuits	BDS	2123	0.222	3878	0.406	0.628	1805
Exacta Circuits	BDS	5468	0.326	13501	0.806	1.132	7402
Keltek Electronics	BDS	1531	0.278	1286	0.233	0.511	681
Beckman International	FIFE	3129	0.262	-157	-0.013	0.248	1049
Hughes Microelectronics	FIFE	5256	0.245	9672	0.451	0.696	6502
Prestwick Circuits	AYR	2971	0.212	5661	0.404	0.616	5610
National Semiconductor	GW	16362	0.158	36160	0.349	0.507	32024
Sprague Electric	BDS	1464	0.112	4020	0.306	0.418	1347
Ferranti PLC	PTH & KIN	164700	0.365	166100	0.368	0.732	90400
Ashdown Printed Circuits	LTH	-	-	-	-	-	-
Highland Electronics	HLAND	-	-	-	-	-	-
Met-Etch	BDS	-	-	-	-	-	-
Gentech International	-	-	-	-	-	-	-
Industry Totals		203004	0.242	240121	0.368	0.610	146820

ELECTRONIC COMPONENT MANUFACTURE (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Bepi Circuits	5.610	2879	1432	2.010	6.6	32.2	25.2
Exacta Circuits	11.309	6729	2280	2.951	1.0	308.3	-
Keltek Electronics	1.181	1739	1056	1.647	1.1	101.9	0.3
Beckman International	1.859	6204	7522	0.825	-	-	79.8
Hughes Microelectronics	9.273	9440	6445	1.465	0.7	5.2	38.3
Prestwick Circuits	19.316	3965	3590	1.104	0.9	38.4	10.2
National Semiconductor	13.923	31097	19118	1.627	0.6	5.2	50.6
Sprague Electric	8.412	3647	3156	1.156	-	83.4	31.6
Ferranti PLC	4.143	190100	122900	1.547	0.2	8.2	-
Ashdown Printed Circuits	-	-	-	-	-	-	-
Highland Electronics	-	-	-	-	-	-	-
Met-Etch	-	-	-	-	-	-	-
Gentech International	-	-	-	-	-	-	-
Industry Totals	8.336	255800	167499	1.592	1.6	72.9	33.7

ELECTRONIC COMPONENT MANUFACTURE (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Bepi Circuits	7.459	4240	2167	1.957	2.7	7.9	28.8
Exacta Circuits	12.631	9746	3647	2.672	3.0	450.3	-
Keltek Electronics	2.441	1985	1380	1.438	1.6	57.4	0.1
Beckman International	1.857	8031	9237	0.869	-	54.2	78.1
Hughes Microelectronics	10.096	10621	7451	1.425	0.6	5.1	42.3
Prestwick Circuits	17.422	5462	5411	1.009	1.2	24.6	10.9
National Semiconductor	19.350	36899	32763	1.126	0.8	3.0	46.5
Sprague Electric	8.018	6963	4290	1.623	21.6	33.2	32.1
Ferranti PLC	4.737	234700	159000	1.476	0.2	7.0	-
Ashdown Printed Circuits	-	-	-	-	-	-	-
Highland Electronics	-	-	-	-	-	-	-
Met-Etch	-	-	-	-	-	-	-
Gentech International	-	-	-	-	-	-	-
Industry Totals	9.335	318647	225346	1.511	4.0	71.4	34.1

ELECTRONIC COMPONENT MANUFACTURE (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Bepi Circuits	613	11500	5.330	20.305	300	38.333
Exacta Circuits	1074	19679	5.458	17.487	569	34.585
Keltek Electronics	562	7081	7.937	28.395	271	26.129
Beckman International	1307	18155	7.199	51.798	554	32.771
Hughes Microelectronics	1580	21458	7.363	0.000	644	33.320
Prestwick Circuits	1526	18524	8.238	32.276	402	46.080
National Semiconductor	7010	233566	3.001	125.639	2093	111.594
Sprague Electric	-939	20756	-4.524	58.225	163	127.337
Ferranti PLC	46000	567900	8.100	25.725	20454	27.765
Ashdown Printed Circuits	-97	1011	-9.594	-20.830	37	27.324
Highland Electronics	614	9329	6.582	36.051	171	54.556
Met-Etch	108	6199	1.742	57.776	167	37.120
Gentech International	121	1721	7.031	3.988	137	12.562
Industry Totals	59479	936879	6.349	41.673	25962	36.087

ELECTRONIC COMPONENT MANUFACTURE (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Bepi Circuits	-920	9841	-9.349	-14.426	303	32.479
Exacta Circuits	301	16916	1.779	-14.040	463	36.536
Keltek Electronics	294	5526	5.320	-21.960	268	20.619
Beckman International	682	17112	3.986	-5.745	465	36.800
Hughes Microelectronics	2975	28233	10.537	31.573	821	34.389
Prestwick Circuits	275	18771	1.465	1.333	375	50.056
National Semiconductor	4225	225150	1.877	-3.603	1555	144.791
Ferranti PLC	41100	595800	6.898	4.913	21222	28.075
Ashdown Printed Circuits	92	1364	6.745	34.916	41	33.268
Highland Electronics	579	8755	6.613	-6.153	172	50.901
Met-Etch	-175	4013	-4.361	-35.264	112	35.830
Gentech International	151	2179	6.930	26.612	146	14.925
Cochrane & Johnson	-166	2034	-8.161	-	100	20.340
Industry Totals	49413	935694	5.281	-0.126	26043	35.929

ELECTRONIC COMPONENT MANUFACTURE (1985)

Firms	Lctn-Code	Wage Bill	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Bepi Circuits	BDS	2621	0.228	3658	0.318	0.546	2404
Exacta Circuits	BDS	5427	0.276	9786	0.497	0.773	6704
Keltek Electronics	BDS	1624	0.229	1181	0.167	0.396	649
Beckman International	FIFE	3380	0.186	1141	0.063	0.249	2044
Hughes Microelectronics	FIFE	6129	0.286	11282	0.526	0.811	9582
Prestwick Circuits	AYR	4055	0.219	13346	0.720	0.939	12481
National Semiconductor	GW	22912	0.098	64648	0.277	0.375	55515
Sprague Electric	BDS	1720	0.083	2713	0.131	0.214	1465
Ferranti PLC	PTH & KIN	200900	0.354	193700	0.341	0.695	114300
Ashdown Printed Circuits	LTH	-	-	622	0.615	-	417
Highland Electronics	HLAND	-	-	-	-	-	-
Met-Etch	BDS	885	0.143	265	0.043	0.186	446
Gentech International	-	-	-	-	-	-	-
Industry Totals		249653	0.210	302342	0.336	0.518	206007

ELECTRONIC COMPONENT MANUFACTURE (1986)

Firms	Lctn-Code	Wage Bill	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Bepi Circuits	BDS	2757	0.280	4246	0.431	0.712	3240
Exacta Circuits	BDS	4739	0.280	10198	0.603	0.883	6240
Keltek Electronics	BDS	1769	0.320	856	0.155	0.475	846
Beckman International	FIFE	3116	0.182	1813	0.106	0.288	1773
Hughes Microelectronics	FIFE	7244	0.257	16369	0.580	0.836	12863
Prestwick Circuits	AYR	4247	0.226	10086	0.537	0.764	12889
National Semiconductor	GW	19545	0.087	45624	0.203	0.289	49416
Ferranti PLC	PTH & KIN	221800	0.372	208300	0.350	0.722	128700
Ashdown Printed Circuits	LTH	474	0.348	660	0.484	0.831	462
Highland Electronics	HLAND	-	-	-	-	-	-
Met-Etch	BDS	1104	0.275	34	0.008	0.284	383
Gentech International	-	-	-	-	-	-	-
Cochrane & Johnson	GW	821	0.404	692	0.340	0.744	414
Industry Totals		267616	0.276	298878	0.345	0.621	217226

ELECTRONIC COMPONENT MANUFACTURE (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Bepi Circuits	8.013	3498	2244	1.559	2.1	27.0	23.0
Exacta Circuits	11.782	7402	4320	1.713	9.3	590.4	-
Keltek Electronics	2.395	1901	1369	1.389	0.7	15.5	0.2
Beckman International	3.690	6394	7297	0.876	5.6	0.5	78.8
Hughes Microelectronics	14.879	10853	9153	1.186	0.4	13.1	41.5
Prestwick Circuits	31.047	12120	11255	1.077	2.5	23.4	19.9
National Semiconductor	26.524	70070	60937	1.150	2.4	18.7	68.3
Sprague Electric	8.988	7626	6378	1.196	144.4	-	36.1
Ferranti PLC	5.588	319200	239800	1.331	0.4	11.5	-
Ashdown Printed Circuits	11.270	482	277	1.740	-	-	-
Highland Electronics	-	-	-	-	-	-	-
Met-Etch	2.671	1590	1771	0.898	-	-	-
Gentech International	-	-	-	-	-	-	-
Industry Totals	11.532	441136	344801	1.283	18.6	87.5	38.3

ELECTRONIC COMPONENT MANUFACTURE (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Bepi Circuits	10.693	3362	2356	1.427	10.0	-	26.9
Exacta Circuits	13.477	5994	3050	1.965	0.6	54.6	-
Keltek Electronics	3.157	1190	1180	1.008	0.1	0.7	0.1
Beckman International	3.813	6297	6257	1.006	3.0	0.0	76.7
Hughes Microelectronics	15.667	16915	13409	1.261	1.0	14.0	42.9
Prestwick Circuits	34.371	8765	11568	0.758	3.3	-	24.8
National Semiconductor	31.779	77321	81113	0.953	2.0	296.2	70.1
Ferranti PLC	6.064	323700	244100	1.326	0.4	17.1	-
Ashdown Printed Circuits	11.268	583	385	1.514	-	-	-
Highland Electronics	-	-	-	-	-	-	-
Met-Etch	3.420	2186	2535	0.862	-	-	-
Gentech International	-	-	-	-	-	-	-
Cochrane & Johnson	4.140	1069	791	1.351	-	-	-
Industry Totals	12.532	447382	366744	1.221	2.6	63.8	40.3

ELECTRONIC COMPONENT MANUFACTURE (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Bepi Circuits	-742	11334	-6.547	15.171	282	40.191
Exacta Circuits	1431	21237	6.738	25.544	498	42.645
Keltek Electronics	591	8230	7.181	48.932	240	34.292
Beckman International	420	17719	2.370	3.547	428	41.400
Hughes Microelectronics	3354	30970	10.830	9.694	869	35.639
Prestwick Circuits	-220	19881	-1.107	5.913	443	44.878
National Semiconductor	-22224	220114	-10.097	-2.237	1544	142.561
Ferranti PLC	62200	674400	9.223	13.192	22742	29.654
Ashdown Printed Circuits	-171	1236	-13.835	-9.384	37	33.405
Highland Electronics	876	10603	8.262	21.108	248	42.754
Met-Etch	451	5297	8.514	31.996	125	42.376
Gentech International	227	2240	10.134	2.799	146	15.342
Industry Totals	46193	1023261	4.514	9.359	27602	37.072

ELECTRONIC COMPONENT MANUFACTURE (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Bepi Circuits	485	12594	3.851	11.117	294	42.837
Exacta Circuits	1816	24224	7.497	14.065	536	45.194
Keltek Electronics	1129	9090	12.420	10.450	230	39.522
Beckman International	240	17651	1.360	-0.384	340	51.915
Hughes Microelectronics	3414	31771	10.746	2.586	887	35.818
Prestwick Circuits	1120	23706	4.725	19.239	404	58.678
National Semiconductor	-4546	262895	-1.729	19.436	1685	156.021
Ferranti PLC	38600	605500	6.375	-10.216	20854	29.035
Ashdown Printed Circuits	-65	1280	-5.078	3.560	41	31.220
Highland Electronics	614	9668	6.351	-8.818	167	57.892
Met-Etch	556	6035	9.213	13.932	131	46.069
Gentech International	244	2134	11.434	-4.732	143	14.923
Industry Totals	43607	1006548	4.332	-1.633	25712	39.147

ELECTRONIC COMPONENT MANUFACTURE (1987)

Firms	Lctn-Code	Wage Bill	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Bepi Circuits	BDS	2798	0.247	3711	0.327	0.574	2351
Exacta Circuits	BDS	5624	0.265	10713	0.504	0.769	6172
Keltek Electronics	BDS	1735	0.211	1239	0.151	0.361	918
Beckman International	FIFE	2999	0.169	2231	0.126	0.295	1490
Hughes Microelectronics	FIFE	7904	0.255	19136	0.618	0.873	12983
Prestwick Circuits	AYR	5165	0.260	9562	0.481	0.741	14755
National Semiconductor	GW	22535	0.102	24852	0.113	0.215	43618
Ferranti PLC	PTH & KIN	-	-	226800	0.336	-	135000
Ashdown Printed Circuits	LTH	434	0.351	394	0.319	0.670	467
Highland Electronics	HLAND	-	-	-	-	-	-
Met-Etch	BDS	1310	0.247	441	0.083	0.331	389
Gentech International	-	-	-	-	-	-	-
Industry Totals		50504	0.234	299079	0.306	0.537	218143

ELECTRONIC COMPONENT MANUFACTURE (1988)

Firms	Lctn-Code	Wage Bill	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Bepi Circuits	BDS	2368	0.188	3607	0.286	0.474	2179
Exacta Circuits	BDS	5064	0.209	10835	0.447	0.656	6410
Keltek Electronics	BDS	1572	0.173	1106	0.122	0.295	676
Beckman International	FIFE	2676	0.152	2466	0.140	0.291	1438
Hughes Microelectronics	FIFE	6145	0.193	12903	0.406	0.600	9399
Prestwick Circuits	AYR	3671	0.155	8710	0.367	0.522	10051
National Semiconductor	GW	18471	0.070	40178	0.153	0.223	39640
Ferranti PLC	PTH & KIN	-	-	187580	0.310	-	108840
Ashdown Printed Circuits	LTH	-	-	-	-	-	-
Highland Electronics	HLAND	-	-	-	-	-	-
Met-Etch	BDS	-	-	-	-	-	-
Gentech International	-	-	-	-	-	-	-
Industry Totals		39968	0.163	267386	0.279	0.437	178632

ELECTRONIC COMPONENT MANUFACTURE (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Bepi Circuits	8.337	2999	1639	1.830	5.4	-	24.7
Exacta Circuits	12.394	7512	3736	2.011	2.1	110.8	-
Keltek Electronics	3.825	2127	1806	1.178	0.4	11.4	0.1
Beckman International	3.481	8094	7353	1.101	2.9	1.2	75.4
Hughes Microelectronics	14.940	22183	16030	1.384	0.7	9.9	40.4
Prestwick Circuits	33.307	7607	12800	0.594	3.2	142.1	18.1
National Semiconductor	28.250	78628	97394	0.807	4.1	-	67.1
Ferranti PLC	5.936	339400	247600	1.371	0.2	13.3	-
Ashdown Printed Circuits	12.622	569	642	0.886	-	-	-
Highland Electronics	-	-	-	-	-	-	-
Met-Etch	3.112	7905	3541	2.232	-	-	-
Gentech International	-	-	-	-	-	-	-
Industry Totals	12.620	477024	392541	1.339	2.4	48.1	37.6

ELECTRONIC COMPONENT MANUFACTURE (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Bepi Circuits	7.411	3396	1968	1.726	-	-	-
Exacta Circuits	11.958	7477	3407	2.195	-	-	-
Keltek Electronics	2.940	1788	1358	1.317	-	-	-
Beckman International	4.229	6028	5000	1.206	-	-	-
Hughes Microelectronics	10.596	14002	10498	1.334	-	-	-
Prestwick Circuits	24.879	7584	8925	0.850	-	-	-
National Semiconductor	23.525	58803	58265	1.009	-	-	-
Ferranti PLC	5.219	281420	202680	1.388	-	-	-
Ashdown Printed Circuits	-	-	-	-	-	-	-
Highland Electronics	-	-	-	-	-	-	-
Met-Etch	-	-	-	-	-	-	-
Gentech International	-	-	-	-	-	-	-
Industry Totals	11.345	380498	292100	1.378	-	-	-

APPENDIX 5 : General Haulage

Firm Data (1983-88)

Contents :

Profit
Turnover
Profit-Sales Ratio (PSR %)
Annual Sales Growth (Sales %)
Number of Employees (Emp.)
Average Revenue Product (ARP)
Location Code
Wage Bill
Input-Output Ratio for Labour
Capital Employed
Input Output Ratio for Capital
Input Output Ratio (Total)
Fixed Assets (Fx. Ass.)
Fixed Assets per Employee (FA/L)
Current Assets
Current Liabilities
Current Ratio (CR)
Borrowing Ratio (Borrow)
Income Gearing (Inc. Gr.)
Export Ratio (XR)

GENERAL HAULAGE CONTRACTORS (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
Duncan Adams	100	3123	3.202	83	37.627
Charles Alexander	281	9652	2.911	460	20.983
Barbour European	-91	1570	-5.796	18	87.222
George Beattie & Sons	6	1929	0.311	28	68.893
C.R.S. Transport	-22	2510	-0.876	81	30.988
Carntyne Transport Co.	70	1558	4.493	43	36.233
Connal & Co.	-24	2891	-0.830	95	30.432
Express Carriers	-6	1236	-0.485	7	176.571
James Hemphill	302	4825	6.259	169	28.550
Highland Haulage	139	2206	6.301	106	20.811
Andrew Hogg & Sons	45	2175	2.069	95	22.895
Inter-City Transport	18	4313	0.417	292	14.771
Harry Lawson	188	5864	3.206	194	30.227
MacBrayne Haulage	261	2859	9.129	123	23.244
W.H. Malcolm	668	12663	5.275	428	29.586
McKelvie & Co.	-96	4336	-2.214	164	26.439
McPhersons Transport	30	1333	2.251	45	29.622
N.E. Transport	123	2157	5.702	30	71.900
J.M.Piggins	-2	2865	-0.070	80	35.813
John G. Russell	233	3283	7.097	127	25.850
J. Russell (Grangemouth)	136	3576	3.803	118	30.305
Scottish Road Services	828	16564	4.999	803	20.628
Scottish Express	182	4283	4.249	299	14.324
Sutherlands Transpt Svs.	189	4853	3.894	179	27.112
Utd. Transport Distribution	-645	10128	-6.368	344	29.442
William Carmichcal	6	215	2.791	20	10.750
Curries of Dumfries	422	9025	4.676	105	85.952
Darroch & Newell	-17	175	-9.714	7	25.000
Freightline	19	1212	1.568	14	86.571
C.Gamble & Son	0	217	0.000	9	24.111
William Grant (Haulage)	-16	901	-1.776	24	37.542
Hayton Coulthard	31	1644	1.886	12	137.000
Percy Hull	11	161	6.832	3	53.667
T.K. Road Transport Co.	16	544	2.941	14	38.857
Montogomery Transport	71	918	7.734	32	28.688
S. & H. Haulage	18	462	3.896	17	27.176
Spearmen's T. & T. Co.	2	50	4.000	5	10.000
R.D. Spittal	32	1398	2.289	35	39.943
Stevenson Brothers	-7	1937	-0.361	41	47.244
J.S.L. Watson Haulage	0	226	0.000	11	20.545
Yuill & Dodds	20	3420	0.585	73	46.849
John M. Young	38	591	6.430	31	19.065
J. & G. Campbell	11	295	3.729	13	22.692
Dankin's Transport Svs.	25	2611	0.957	60	43.517
John Hutchison & Sons	-31	772	-4.016	22	35.091
Industry Sub-Totals	3564	139526		4959	

J.B. McBean	81	1362	5.947	33	41.273
J. Moffats & Sons	51	1521	3.353	43	35.372
Thomas Muir	-28	1108	-2.527	57	19.439
Adam Wishart & Sons	15	919	1.632	19	48.368
M.A. Wilson & Sons	52	1675	3.104	42	39.881
Saddler's Transport	-3	98	-3.061	2	49.000
Brora Transport	7	133	5.263	4	33.250
Dyce Carriers	18	407	4.423	11	37.000
Glen Dee Holdings	-3	327	-0.917	12	27.250
D. & J. McIntosh	37	612	6.046	15	40.800
Industry Totals	3791	147688	2.567	5197	28.418

GENERAL HAULAGE CONTRACTORS (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Duncan Adams	STIR	633	0.203	419	0.134	0.337	609
Charles Alexander	ABD	3634	0.377	3287	0.341	0.717	3069
Barbour European	STIR	220	0.140	-59	-0.038	0.103	126
George Beattie & Sons	GW	-	-	564	0.292	-	623
C.R.S. Transport	GW	-	-	318	0.127	-	429
Carntyne Transport Co.	GW	-	-	437	0.280	-	456
Connal & Co.	GW	560	0.194	1446	0.500	0.694	1208
Express Carriers	LTH	64	0.052	117	0.095	0.146	48
James Hemphill	GW	1431	0.297	1654	0.343	0.639	1369
Highland Haulage	HLAND	766	0.347	1098	0.498	0.845	888
Andrew Hogg & Sons	GW	815	0.375	564	0.259	0.634	1443
Inter-City Transport	GW	1748	0.405	3291	0.763	1.168	2599
Harry Lawson	PTH & KIN	1506	0.257	470	0.080	0.337	690
MacBrayne Haulage	GW	890	0.311	1383	0.484	0.795	990
W.H. Malcolm	GW	3161	0.250	5738	0.453	0.703	5206
McKelvie & Co.	GW	1568	0.362	2115	0.488	0.849	1633
McPhersons Transport	ABD	403	0.302	1031	0.773	1.076	797
N.E. Transport	ANGUS	301	0.140	1452	0.673	0.813	1796
J.M Piggins	ANGUS	930	0.325	633	0.221	0.546	500
John G. Russell	LNK	884	0.269	1469	0.447	0.717	1356
J. Russell (Grangemouth)	STIR	1073	0.300	2238	0.626	0.926	2009
Scottish Road Services	FLK	5928	0.358	8669	0.523	0.881	3906
Scottish Express	AYR	1920	0.448	2247	0.525	0.973	728
Sutherlands Transpt. Svs.	ABD	1635	0.337	3664	0.755	1.092	2870
Utd. Transport Distribution	STIR	2584	0.255	3263	0.322	0.577	4574
William Carmicheal	-	-	-	-	-	-	-
Curries of Dumfries	-	-	-	-	-	-	-
Darroch & Newell	LNK	-	-	-	-	-	-
Freightline	ABD	-	-	-	-	-	-
C.Gamble & Son	DMF & GAL	-	-	-	-	-	-
William Grant (Haulage)	LNK	-	-	-	-	-	-
Hayton Coulthard	DMF & GAL	-	-	-	-	-	-
Percy Hull	GW	-	-	-	-	-	-
T.K. Road Transport Co.	-	-	-	-	-	-	-
Montogomery Transport	DMF & GAL	-	-	-	-	-	-
S. & H. Haulage	-	-	-	-	-	-	-
Spearmen's T. & T. Co.	GW	-	-	-	-	-	-
R.D. Spittal	-	-	-	-	-	-	-
Stevenson Brothers	-	-	-	-	-	-	-
J.S.L. Watson Haulage	-	-	-	-	-	-	-
Yuill & Dodds	LNK	-	-	-	-	-	-
John M. Young	DMF & GAL	-	-	-	-	-	-
J. & G. Campbell	GW	-	-	-	-	-	-
Dankin's Transport Svs.	FIFE	-	-	-	-	-	-
John Hutchison & Sons	FIFE	-	-	-	-	-	-
Industry Sub-Totals		32654		47508			39922

J.B. McBean	LTH	-	-	-	-	-	-
J. Moffats & Sons	-	-	-	-	-	-	-
Thomas Muir	FIFE	-	-	-	-	-	-
Adam Wishart & Sons	AYR	-	-	-	-	-	-
M.A. Wilson & Sons	-	-	-	-	-	-	-
Saddler's Transport	LTH	-	-	-	-	-	-
Brora Transport	HLAND	-	-	-	-	-	-
Dyce Carriers	-	-	-	-	-	-	-
Glen Dee Holdings	ABD	-	-	-	-	-	-
D. & J. McIntosh	LTH	-	-	-	-	-	-
Industry Totals		32654	0.286	47508	0.399	0.708	39922

GENERAL HAULAGE CONTRACTORS (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Duncan Adams	7.337	596	786	0.758	2.3	9.1	14.6
Charles Alexander	6.672	1803	1585	1.138	2.3	57.2	-
Barbour European	7.000	489	674	0.726	-	-	41.9
George Beattie & Sons	22.250	272	331	0.822	0.2	80.0	-
C.R.S. Transport	5.296	421	532	0.791	1.0	144.0	-
Carntyne Transport Co.	10.605	194	213	0.911	0.0	4.1	-
Connal & Co.	12.716	505	267	1.891	0.5	-	-
Express Carriers	6.857	298	229	1.301	0.8	-	-
James Hemphill	8.101	1277	992	1.287	0.2	4.7	0.0
Highland Haulage	8.377	654	444	1.473	1.1	47.5	-
Andrew Hogg & Sons	15.189	613	1492	0.411	16.7	112.8	-
Inter-City Transport	8.901	1524	832	1.832	3.6	0.0	-
Harry Lawson	3.557	1116	1336	0.835	1.6	32.6	-
MacBrayne Haulage	8.049	922	529	1.743	0.1	-	-
W.H. Malcolm	12.164	5036	4504	1.118	6.9	4.7	-
McKelvie & Co.	9.957	1313	831	1.580	-	-	-
McPhersons Transport	17.711	424	190	2.232	763.0	79.6	-
N.E. Transport	59.867	585	929	0.630	0.6	39.1	-
J.M.Piggins	6.250	1013	880	1.151	0.2	-	-
John G. Russell	10.677	830	717	1.158	0.5	13.1	-
J. Russell (Grangemouth)	17.025	939	710	1.323	5.5	62.2	-
Scottish Road Services	4.864	8006	3243	2.469	0.7	15.8	0.0
Scottish Express	2.435	4272	2753	1.552	0.1	-	-
Sutherlands Transpt. Svs.	16.034	2022	1228	1.647	3.7	0.0	-
Utd. Transport Distribution	13.297	2902	3380	0.859	1.2	-	-
William Carmicheal	-	-	-	-	-	-	-
Curries of Dumfries	-	-	-	-	-	-	-
Darroch & Newell	-	-	-	-	-	-	-
Freightline	-	-	-	-	-	-	-
C.Gamble & Son	-	-	-	-	-	-	-
William Grant (Haulage)	-	-	-	-	-	-	-
Hayton Coulthard	-	-	-	-	-	-	-
Percy Hull	-	-	-	-	-	-	-
T.K. Road Transport Co.	-	-	-	-	-	-	-
Montogomery Transport	-	-	-	-	-	-	-
S. & H. Haulage	-	-	-	-	-	-	-
Spearmen's T. & T. Co.	-	-	-	-	-	-	-
R.D. Spittal	-	-	-	-	-	-	-
Stevenson Brothers	-	-	-	-	-	-	-
J.S.L. Watson Haulage	-	-	-	-	-	-	-
Yuill & Dodds	-	-	-	-	-	-	-
John M. Young	-	-	-	-	-	-	-
J. & G. Campbell	-	-	-	-	-	-	-
Dankin's Transport Svs.	-	-	-	-	-	-	-
John Hutchison & Sons	-	-	-	-	-	-	-
Industry Sub-Totals		37430	29607				

J.B. McBean	-	-	-	-	-	-	-
J. Moffats & Sons	-	-	-	-	-	-	-
Thomas Muir	-	-	-	-	-	-	-
Adam Wishart & Sons	-	-	-	-	-	-	-
M.A. Wilson & Sons	-	-	-	-	-	-	-
Saddler's Transport	-	-	-	-	-	-	-
Brora Transport	-	-	-	-	-	-	-
Dyce Carriers	-	-	-	-	-	-	-
Glen Dee Holdings	-	-	-	-	-	-	-
D. & J. McIntosh	-	-	-	-	-	-	-
Industry Totals	12.047	37430	29607	1.265	35.3	41.6	14.1

GENERAL HAULAGE CONTRACTORS (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Duncan Adams	37	3228	1.146	3.362	79	40.861
Charles Alexander	223	9811	2.273	1.647	450	21.802
Barbour European	14	1660	0.843	5.732	11	150.909
George Beattie & Sons	30	2726	1.101	41.317	30	90.867
C.R.S. Transport	-119	2509	-4.743	-0.040	80	31.363
Carntyne Transport Co.	124	1856	6.681	19.127	43	43.163
Connal & Co.	-24	3175	-0.756	9.824	102	31.127
Express Carriers	9	1251	0.719	1.214	7	178.714
James Hemphill	402	5178	7.764	7.316	159	32.566
Highland Haulage	129	2267	5.690	2.765	107	21.187
Andrew Hogg & Sons	-10	2620	-0.382	20.460	100	26.200
Inter-City Transport	163	6062	2.689	40.552	291	20.832
Harry Lawson	158	6526	2.421	11.289	215	30.353
MacBrayne Haulage	13	2748	0.473	-3.882	121	22.711
W.H. Malcolm	224	13197	1.697	4.217	433	30.478
McKelvie & Co.	-29	4780	-0.607	10.240	173	27.630
McPhersons Transport	102	1756	5.809	31.733	59	29.763
N.E. Transport	44	2026	2.172	-6.073	35	57.886
J.M.Piggins	310	3200	9.688	11.693	81	39.506
John G. Russell	88	3562	2.471	8.498	130	27.400
J. Russell (Grangemouth)	162	4007	4.043	12.053	125	32.056
Scottish Road Services	1678	18209	9.215	9.931	785	23.196
Scottish Express	310	5140	6.031	20.009	317	16.215
Sutherlands Transpt. Svs.	292	8791	3.322	81.146	276	31.851
Utd. Transport Distribution	-537	8405	-6.389	-17.012	410	20.500
William Carmichcal	2	177	1.130	-17.674	17	10.412
Curries of Dumfries	401	9725	4.123	7.756	111	87.613
Darroch & Newell	-2	188	-1.064	7.429	7	26.857
Freightline	15	1111	1.350	-8.333	14	79.357
C.Gamble & Son	0	212	0.000	-2.304	9	23.556
William Grant (Haulage)	2	997	0.201	10.655	25	39.880
Hayton Coulthard	42	1755	2.393	6.752	13	135.000
Percy Hull	4	113	3.540	-29.814	4	28.250
T.K. Road Transport Co.	20	607	3.295	11.581	15	40.467
Montogomery Transport	100	1055	9.479	14.924	33	31.970
S. & H. Haulage	8	478	1.674	3.463	17	28.118
Spearmen's T. & T. Co.	3	44	6.818	-12.000	5	8.800
R.D. Spittal	69	1654	4.172	18.312	41	40.341
Stevenson Brothers	23	2104	1.093	8.622	43	48.930
J.S.L. Watson Haulage	0	259	0.000	14.602	11	23.545
Yuill & Dodds	160	4298	3.723	25.673	81	53.062
John M. Young	39	538	7.249	-8.968	31	17.355
J. & G. Campbell	10	292	3.425	-1.017	12	24.333
Dankin's Transport Svs.	12	2290	0.524	-12.294	59	38.814
John Hutchison & Sons	-22	830	-2.651	7.513	25	33.200
Industry Sub-Totals	4679	153417			5192	

J.B. McBean	128	1455	8.797	6.828	35	41.571
J. Moffats & Sons	44	1511	2.912	-0.657	43	35.140
Thomas Muir	-106	1421	-7.460	28.249	64	22.203
Adam Wishart & Sons	16	1008	1.587	9.684	21	48.000
M.A. Wilson & Sons	58	1529	3.793	-8.716	41	37.293
Saddler's Transport	0	105	0.000	7.143	2	52.500
Brora Transport	1	167	0.599	25.564	5	33.400
Dyce Carriers	13	421	3.088	3.440	12	35.083
Glen Dee Holdings	16	393	4.071	20.183	14	28.071
D. & J. McIntosh	26	550	4.727	-10.131	15	36.667
Industry Totals	4875	161977	3.010	9.675	5444	29.753

GENERAL HAULAGE CONTRACTORS (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Duncan Adams	STIR	657	0.204	353	0.109	0.313	504
Charles Alexander	ABD	3769	0.384	3124	0.318	0.703	3049
Barbour European	STIR	151	0.091	-26	-0.016	0.075	163
George Beattie & Sons	GW	-	-	594	0.218	-	748
C.R.S. Transport	GW	-	-	166	0.066	-	426
Carntyne Transport Co.	GW	345	0.186	559	0.301	0.487	561
Connal & Co.	GW	640	0.202	1454	0.458	0.660	1148
Express Carriers	LTH	60	0.048	125	0.100	0.148	56
James Hemphill	GW	1504	0.290	3217	0.621	0.912	3374
Highland Haulage	HLAND	802	0.354	1031	0.455	0.809	910
Andrew Hogg & Sons	GW	-	-	709	0.271	-	1652
Inter-City Transport	GW	2369	0.391	3732	0.616	1.006	3119
Harry Lawson	PTH & KIN	1696	0.260	623	0.095	0.355	781
MacBrayne Haulage	GW	918	0.334	1200	0.437	0.771	1027
W.H. Malcolm	GW	3394	0.257	5539	0.420	0.677	6139
McKelvie & Co.	GW	1714	0.359	2023	0.423	0.782	1469
McPhersons Transport	ABD	546	0.311	1136	0.647	0.958	911
N.E. Transport	ANGUS	314	0.155	1413	0.697	0.852	1796
J.M Piggins	ANGUS	1062	0.332	943	0.295	0.627	627
John G. Russell	LNK	955	0.268	1493	0.419	0.687	1348
J. Russell (Grangemouth)	STIR	1206	0.301	3111	0.776	1.077	2835
Scottish Road Services	FLK	6215	0.341	8594	0.472	0.813	3346
Scottish Express	AYR	2303	0.448	2375	0.462	0.910	1000
Sutherlands Transpt. Svs.	ABD	2642	0.301	3206	0.365	0.665	2472
Utd. Transport Distribution	STIR	-	-	6973	0.830	-	-
William Carmichcal	-	-	-	-	-	-	-
Curries of Dumfries	-	-	-	-	-	-	-
Darroch & Newell	LNK	-	-	-	-	-	-
Freightline	ABD	-	-	-	-	-	-
C.Gamble & Son	DMF & GAL	-	-	-	-	-	-
William Grant (Haulage)	LNK	-	-	-	-	-	-
Hayton Coulthard	DMF & GAL	-	-	-	-	-	-
Percy Hull	GW	-	-	-	-	-	-
T.K. Road Transport Co.	-	-	-	-	-	-	-
Montogomery Transport	DMF & GAL	-	-	-	-	-	-
S. & H. Haulage	-	-	-	-	-	-	-
Spearmen's T. & T. Co.	GW	-	-	-	-	-	-
R.D. Spittal	-	-	-	-	-	-	-
Stevenson Brothers	-	-	-	-	-	-	-
J.S.L. Watson Haulage	-	-	-	-	-	-	-
Yuill & Dodds	LNK	-	-	-	-	-	-
John M. Young	DMF & GAL	-	-	-	-	-	-
J. & G. Campbell	GW	-	-	-	-	-	-
Dankin's Transport Svs.	FIFE	-	-	-	-	-	-
John Hutchison & Sons	FIFE	-	-	-	-	-	-
Industry Sub-Totals		33262		53667			39461

J.B. McBean	LTH	-	-	-	-	-	-
J. Moffats & Sons	-	-	-	-	-	-	-
Thomas Muir	FIFE	-	-	-	-	-	-
Adam Wishart & Sons	AYR	-	-	-	-	-	-
M.A. Wilson & Sons	-	-	-	-	-	-	-
Saddler's Transport	LTH	-	-	-	-	-	-
Brora Transport	HLAND	-	-	-	-	-	-
Dyce Carriers	-	-	-	-	-	-	-
Glen Dee Holdings	ABD	-	-	-	-	-	-
D. & J. McIntosh	LTH	-	-	-	-	-	-
Industry Totals		33262	0.277	53667	0.394	0.680	39461

GENERAL HAULAGE CONTRACTORS (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Duncan Adams	6.380	758	909	0.834	2.1	31.5	14.8
Charles Alexander	6.776	1888	1813	1.041	2.3	31.8	-
Barbour European	14.818	527	716	0.736	-	68.9	43.2
George Beattie & Sons	24.933	571	725	0.788	0.6	14.3	-
C.R.S. Transport	5.325	409	669	0.611	2.2	-	-
Carntyne Transport Co.	13.047	397	399	0.995	0.5	2.4	-
Connal & Co.	11.255	567	261	2.172	0.6	-	-
Express Carriers	8.000	308	239	1.289	1.0	-	-
James Hemphill	21.220	1343	1500	0.895	1.2	5.9	0.0
Highland Haulage	8.505	642	521	1.232	1.1	35.8	-
Andrew Hogg & Sons	16.520	790	1733	0.456	-	-	-
Inter-City Transport	10.718	1492	879	1.697	4.5	37.5	-
Harry Lawson	3.633	1276	1434	0.890	1.2	25.1	-
MacBrayne Haulage	8.488	764	591	1.293	0.1	-	-
W.H. Malcolm	14.178	4927	5527	0.891	10.7	18.2	-
McKelvie & Co.	8.491	1312	758	1.731	13.8	-	-
McPhersons Transport	15.441	504	279	1.806	888.0	48.5	-
N.E. Transport	51.314	776	1159	0.670	0.7	68.8	-
J.M.Piggins	7.741	1361	1045	1.302	0.4	-	-
John G. Russell	10.369	1058	913	1.159	0.4	28.5	-
J. Russell (Grangemouth)	22.680	1292	1016	1.272	8.5	45.5	-
Scottish Road Services	4.262	10138	4890	2.073	0.6	7.6	0.0
Scottish Express	3.155	5469	4094	1.336	0.1	-	-
Sutherlands Transpt. Svs.	8.957	2201	1467	1.500	3.1	27.9	-
Utd. Transport Distribution	-	4197	3953	1.062	-	-	-
William Carmichcal	-	-	-	-	-	-	-
Curries of Dumfries	-	-	-	-	-	-	-
Darroch & Newell	-	-	-	-	-	-	-
Freightline	-	-	-	-	-	-	-
C.Gamble & Son	-	-	-	-	-	-	-
William Grant (Haulage)	-	-	-	-	-	-	-
Hayton Coulthard	-	-	-	-	-	-	-
Percy Hull	-	-	-	-	-	-	-
T.K. Road Transport Co.	-	-	-	-	-	-	-
Montogomery Transport	-	-	-	-	-	-	-
S. & H. Haulage	-	-	-	-	-	-	-
Spearmen's T. & T. Co.	-	-	-	-	-	-	-
R.D. Spittal	-	-	-	-	-	-	-
Stevenson Brothers	-	-	-	-	-	-	-
J.S.L. Watson Haulage	-	-	-	-	-	-	-
Yuill & Dodds	-	-	-	-	-	-	-
John M. Young	-	-	-	-	-	-	-
J. & G. Campbell	-	-	-	-	-	-	-
Dankin's Transport Svs.	-	-	-	-	-	-	-
John Hutchison & Sons	-	-	-	-	-	-	-
Industry Sub-Totals		44209	37490				

J.B. McBean	-	-	-	-	-	-	-
J. Moffats & Sons	-	-	-	-	-	-	-
Thomas Muir	-	-	-	-	-	-	-
Adam Wishart & Sons	-	-	-	-	-	-	-
M.A. Wilson & Sons	-	-	-	-	-	-	-
Saddler's Transport	-	-	-	-	-	-	-
Brora Transport	-	-	-	-	-	-	-
Dyce Carriers	-	-	-	-	-	-	-
Glen Dee Holdings	-	-	-	-	-	-	-
D. & J. McIntosh	-	-	-	-	-	-	-
Industry Totals	12.759	44209	37490	1.189	42.9	31.1	14.5

GENERAL HAULAGE CONTRACTORS (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Duncan Adams	114	3040	3.750	-5.824	79	38.481
Charles Alexander	226	10474	2.158	6.758	439	23.859
Barbour European	-42	1762	-2.384	6.145	12	146.833
George Beattie & Sons	64	2610	2.452	-4.255	30	87.000
C.R.S. Transport	61	2864	2.130	14.149	80	35.800
Carntyne Transport Co.	76	2056	3.696	10.776	45	45.689
Connal & Co.	33	3553	0.929	11.906	105	33.838
Express Carriers	0	1346	0.000	7.594	7	192.286
James Hemphill	461	5652	8.156	9.154	162	34.889
Highland Haulage	137	2477	5.531	9.263	107	23.150
Andrew Hogg & Sons	6	3708	0.162	41.527	102	36.353
Inter-City Transport	249	6842	3.639	12.867	263	26.015
Harry Lawson	92	7481	1.230	14.634	238	31.433
MacBrayne Haulage	11	3006	0.366	9.389	120	25.050
W.H. Malcolm	1334	16381	8.144	24.127	446	36.729
McKelvie & Co.	94	3985	2.359	-16.632	104	38.317
McPhersons Transport	92	2080	4.423	18.451	59	35.254
N.E. Transport	0	1555	0.000	-23.248	32	48.594
J.M.Piggins	374	3668	10.196	14.625	80	45.850
John G. Russell	261	4518	5.777	26.839	128	35.297
J. Russell (Grangemouth)	215	7207	2.983	79.860	195	36.959
Scottish Road Services	1020	20183	5.054	10.841	808	24.979
Scottish Express	313	5904	5.301	14.864	325	18.166
Sutherlands Transpt. Svs.	265	8835	2.999	0.501	259	34.112
Utd. Transport Distribution	-445	14957	-2.975	77.954	484	30.903
William Carmichcal	30	222	13.514	25.424	22	10.091
Curries of Dumfries	425	10436	4.072	7.311	100	104.360
Darroch & Newell	-14	156	-8.974	-17.021	8	19.500
Freightline	41	1568	2.615	41.134	15	104.533
C.Gamble & Son	9	254	3.543	19.811	9	28.222
William Grant (Haulage)	-44	1034	-4.255	3.711	29	35.655
Hayton Coulthard	56	2156	2.597	22.849	14	154.000
Percy Hull	6	145	4.138	28.319	3	48.333
T.K. Road Transport Co.	18	595	3.025	-1.977	14	42.500
Montogomery Transport	146	1160	12.586	9.953	36	32.222
S. & H. Haulage	3	499	0.601	4.393	18	27.722
Spearmen's T. & T. Co.	9	51	17.647	15.909	5	10.200
R.D. Spittal	77	1876	4.104	13.422	43	43.628
Stevenson Brothers	22	2239	0.983	6.416	47	47.638
J.S.L. Watson Haulage	20	320	6.250	23.552	15	21.333
Yuill & Dodds	157	4411	3.559	2.629	80	55.138
John M. Young	52	649	8.012	20.632	34	19.088
J. & G. Campbell	10	322	3.106	10.274	12	26.833
Dankin's Transport Svs.	-22	2108	-1.044	-7.948	63	33.460
John Hutchison & Sons	-35	826	-4.237	-0.482	26	31.769
Industry Sub-Totals	5977	177171			5302	

J.B. McBean	99	1382	7.164	-5.017	34	40.647
J. Moffats & Sons	95	1684	5.641	11.449	45	37.422
Thomas Muir	-81	1743	-4.647	22.660	71	24.549
Adam Wishart & Sons	10	1123	0.890	11.409	23	48.826
M.A. Wilson & Sons	74	1449	5.107	-5.232	40	36.225
Saddler's Transport	8	121	6.612	15.238	2	60.500
Brora Transport	-1	175	-0.571	4.790	5	35.000
Dyce Carriers	21	442	4.751	4.988	13	34.000
Glen Dee Holdings	14	401	3.491	2.036	14	28.643
D. & J. McIntosh	17	600	2.833	9.091	15	40.000
Industry Totals	6233	186291	3.346	15.011	5564	33.481

GENERAL HAULAGE CONTRACTORS (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Duncan Adams	STIR	668	0.220	203	0.067	0.287	461
Charles Alexander	ABD	3999	0.382	3020	0.288	0.670	2864
Barbour European	STIR	167	0.095	0	0.000	0.095	239
George Beattie & Sons	GW	-	-	658	0.252	-	770
C.R.S. Transport	GW	-	-	691	0.241	-	873
Carntyne Transport Co.	GW	419	0.204	568	0.276	0.480	516
Connal & Co.	GW	729	0.205	1357	0.382	0.587	1197
Express Carriers	LTH	64	0.048	125	0.093	0.140	46
James Hemphill	GW	1720	0.304	3442	0.609	0.913	3669
Highland Haulage	HLAND	879	0.355	1157	0.467	0.822	1009
Andrew Hogg & Sons	GW	974	0.263	484	0.131	0.393	1511
Inter-City Transport	GW	2418	0.353	3806	0.556	0.910	3551
Harry Lawson	PTH & KIN	2002	0.268	713	0.095	0.363	859
MacBrayne Haulage	GW	-	-	-	-	-	-
W.H. Malcolm	GW	3839	0.234	6394	0.390	0.625	6621
McKelvie & Co.	GW	1720	0.432	1203	0.302	0.734	1139
McPhersons Transport	ABD	644	0.310	1025	0.493	0.802	994
N.E. Transport	ANGUS	-	-	-	-	-	-
J.M.Piggins	ANGUS	1177	0.321	1182	0.322	0.643	626
John G. Russell	LNK	996	0.220	1949	0.431	0.652	1756
J. Russell (Grangemouth)	STIR	2092	0.290	3073	0.426	0.717	3294
Scottish Road Services	FLK	6844	0.339	9199	0.456	0.795	3059
Scottish Express	AYR	2614	0.443	2646	0.448	0.891	1013
Sutherlands Transpt. Svs.	ABD	2634	0.298	2329	0.264	0.562	2549
Utd. Transport Distribution	STIR	3470	0.232	6241	0.417	0.649	6729
William Carmichcal	-	-	-	-	-	-	-
Curries of Dumfries	-	-	-	-	-	-	-
Darroch & Newell	LNK	-	-	-	-	-	-
Freightline	ABD	-	-	-	-	-	-
C.Gamble & Son	DMF & GAL	94	0.370	95	0.374	0.744	56
William Grant (Haulage)	LNK	-	-	-	-	-	-
Hayton Coulthard	DMF & GAL	-	-	-	-	-	-
Percy Hull	GW	-	-	89	0.614	-	60
T.K. Road Transport Co.	-	-	-	-	-	-	-
Montogomery Transport	DMF & GAL	296	0.255	410	0.353	0.609	336
S. & H. Haulage	-	-	-	-	-	-	-
Spearmen's T. & T. Co.	GW	-	-	-	-	-	-
R.D. Spittal	-	-	-	-	-	-	-
Stevenson Brothers	-	-	-	-	-	-	-
J.S.L. Watson Haulage	-	-	-	-	-	-	-
Yuill & Dodds	LNK	1252	0.284	630	0.143	0.427	1862
John M. Young	DMF & GAL	-	-	-	-	-	-
J. & G. Campbell	GW	-	-	-	-	-	-
Dankin's Transport Svs.	FIFE	516	0.245	639	0.303	0.548	412
John Hutchison & Sons	FIFE	187	0.226	278	0.337	0.563	244
Industry Sub-Totals		42414		53606			48315

J.B. McBean	LTH	291	0.211	476	0.344	0.555	380
J. Moffats & Sons	-	-	-	-	-	-	-
Thomas Muir	FIFE	567	0.325	242	0.139	0.464	461
Adam Wishart & Sons	AYR	1071	0.954	4923	4.384	5.337	3260
M.A. Wilson & Sons	-	-	-	-	-	-	-
Saddler's Transport	LTH	-	-	2	0.017	-	15
Brora Transport	HLAND	-	-	-	-	-	-
Dyce Carriers	-	-	-	-	-	-	-
Glen Dee Holdings	ABD	-	-	-	-	-	-
D. & J. McIntosh	LTH	-	-	-	-	-	-
Industry Totals		44343	0.299	59249	0.437	0.758	52431

GENERAL HAULAGE CONTRACTORS (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Duncan Adams	5.835	769	1027	0.749	4.6	7.3	10.9
Charles Alexander	6.524	2013	1857	1.084	2.4	51.9	-
Barbour European	19.917	534	773	0.691	-	-	49.0
George Beattie & Sons	25.667	509	621	0.820	0.2	9.9	-
C.R.S. Transport	10.913	371	553	0.671	3.8	67.9	-
Carntyne Transport Co.	11.467	574	522	1.100	0.0	2.6	-
Connal & Co.	11.400	607	447	1.358	0.4	-	-
Express Carriers	6.571	358	279	1.283	1.2	-	-
James Hemphill	22.648	1253	1537	0.815	1.1	5.9	0.0
Highland Haulage	9.430	625	477	1.310	1.5	0.0	-
Andrew Hogg & Sons	14.814	747	1774	0.421	69.7	96.5	-
Inter-City Transport	13.502	1548	1293	1.197	4.7	52.3	-
Harry Lawson	3.609	1494	1640	0.911	1.3	46.2	-
MacBrayne Haulage	-	-	-	-	-	-	-
W.H. Malcolm	14.845	5608	5835	0.961	6.5	4.7	-
McKelvie & Co.	10.952	821	757	1.085	6.6	-	-
McPhersons Transport	16.847	527	496	1.063	788.0	60.0	-
N.E. Transport	-	-	-	-	-	-	-
J.M.Piggins	7.825	1331	775	1.717	0.2	-	-
John G. Russell	13.719	1460	1267	1.152	0.7	16.1	-
J. Russell (Grangemouth)	16.892	1555	1777	0.875	9.1	62.7	-
Scottish Road Services	3.786	9828	4238	2.319	0.5	7.4	0.0
Scottish Express	3.117	5323	3690	1.443	0.1	-	8.5
Sutherlands Transpt. Svs.	9.842	1609	1829	0.880	1.8	46.7	-
Utd. Transport Distribution	13.903	3201	2904	1.102	2.2	795.3	-
William Carmicheal	-	-	-	-	-	-	-
Curries of Dumfries	-	-	-	-	-	-	-
Darroch & Newell	-	-	-	-	-	-	-
Freightline	-	-	-	-	-	-	-
C.Gamble & Son	6.222	131	92	1.424	-	-	-
William Grant (Haulage)	-	-	-	-	-	-	-
Hayton Coulthard	-	-	-	-	-	-	-
Percy Hull	20.000	76	47	1.617	-	-	-
T.K. Road Transport Co.	-	-	-	-	-	-	-
Montogomery Transport	9.333	556	482	1.154	-	-	-
S. & H. Haulage	-	-	-	-	-	-	-
Spearmen's T. & T. Co.	-	-	-	-	-	-	-
R.D. Spittal	-	-	-	-	-	-	-
Stevenson Brothers	-	-	-	-	-	-	-
J.S.L. Watson Haulage	-	-	-	-	-	-	-
Yuill & Dodds	23.275	893	2125	0.420	9.2	0.1	0.0
John M. Young	-	-	-	-	-	-	-
J. & G. Campbell	-	-	-	-	-	-	-
Dankin's Transport Svs.	6.540	735	508	1.447	-	-	-
John Hutchison & Sons	9.385	246	212	1.160	-	-	-
Industry Sub-Totals		44533	39834				

J.B. McBean	11.176	573	477	1.201	-	-	-
J. Moffats & Sons	-	-	-	-	-	-	-
Thomas Muir	6.493	951	1170	0.813	-	-	-
Adam Wishart & Sons	141.739	2763	1100	2.512	-	-	-
M.A. Wilson & Sons	-	-	-	-	-	-	-
Saddler's Transport	7.500	22	35	0.629	-	-	-
Brora Transport	-	-	-	-	-	-	-
Dyce Carriers	-	-	-	-	-	-	-
Glen Dee Holdings	-	-	-	-	-	-	-
D. & J. McIntosh	-	-	-	-	-	-	-
Industry Totals	15.627	48842	42616	1.133	39.8	74.1	11.4

GENERAL HAULAGE CONTRACTORS (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Duncan Adams	175	3401	5.146	11.875	79	43.051
Charles Alexander	362	10453	3.463	-0.200	445	23.490
Barbour European	36	2082	1.729	18.161	13	160.154
George Beattie & Sons	158	2938	5.378	12.567	31	94.774
C.R.S. Transport	205	3252	6.304	13.547	86	37.814
Carntyne Transport Co.	65	2288	2.841	11.284	47	48.681
Connal & Co.	140	3680	3.804	3.574	129	28.527
Express Carriers	9	1479	0.609	9.881	7	211.286
James Hemphill	424	5523	7.677	-2.282	165	33.473
Highland Haulage	105	2364	4.442	-4.562	107	22.093
Andrew Hogg & Sons	33	4211	0.784	13.565	105	40.105
Inter-City Transport	264	7353	3.590	7.469	319	23.050
Harry Lawson	30	7052	0.425	-5.735	219	32.201
MacBrayne Haulage	-153	3413	-4.483	13.540	103	33.136
W.H. Malcolm	1457	16976	8.583	3.632	467	36.351
McKelvie & Co.	136	3735	3.641	-6.274	115	32.478
McPhersons Transport	369	2482	14.867	19.327	63	39.397
N.E. Transport	-47	1072	-4.384	-31.061	17	63.059
J.M.Piggins	327	4128	7.922	12.541	80	51.600
John G. Russell	37	4296	0.861	-4.914	129	33.302
J. Russell (Grangemouth)	597	7159	8.339	-0.666	190	37.679
Scottish Road Services	-69	24551	-0.281	21.642	914	26.861
Scottish Express	342	6946	4.924	17.649	351	19.789
Sutherlands Transpt. Svs.	186	8569	2.171	-3.011	261	32.831
Utd. Transport Distribution	-1250	12321	-10.145	-17.624	512	24.064
William Carmicheal	50	261	19.157	17.568	24	10.875
Curries of Dumfries	443	11789	3.758	12.965	107	110.178
Darroch & Newell	-2	149	-1.342	-4.487	8	18.625
Freightline	-8	1113	-0.719	-29.018	18	61.833
C.Gamble & Son	15	271	5.535	6.693	10	27.100
William Grant (Haulage)	-5	1330	-0.376	28.627	33	40.303
Hayton Coulthard	41	2427	1.689	12.570	15	161.800
Percy Hull	7	100	7.000	-31.034	3	33.333
T.K. Road Transport Co.	22	616	3.571	3.529	14	44.000
Montogomery Transport	151	1336	11.302	15.172	37	36.108
S. & H. Haulage	-12	518	-2.317	3.808	19	27.263
Spearmen's T. & T. Co.	11	45	24.444	-11.765	5	9.000
R.D. Spittal	61	1552	3.930	-17.271	40	38.800
Stevenson Brothers	15	2431	0.617	8.575	51	47.667
J.S.L. Watson Haulage	19	333	5.706	4.063	16	20.813
Yuill & Dodds	142	4209	3.374	-4.579	83	50.711
John M. Young	71	790	8.987	21.726	34	23.235
J. & G. Campbell	8	367	2.180	13.975	12	30.583
Dankin's Transport Svs.	-11	2271	-0.484	7.732	65	34.938
John Hutchison & Sons	28	942	2.972	14.044	27	34.889
Industry Sub-Totals	4984	184574			5575	

J.B. McBean	51	1299	3.926	-6.006	42	30.929
J. Moffats & Sons	119	1721	6.915	2.197	46	37.413
Thomas Muir	-127	1907	-6.660	9.409	75	25.427
Adam Wishart & Sons	6	1290	0.465	14.871	27	47.778
M.A. Wilson & Sons	114	1709	6.671	17.943	45	37.978
Saddler's Transport	11	109	10.092	-9.917	2	54.500
Brora Transport	0	190	0.000	8.571	6	31.667
Dyce Carriers	26	434	5.991	-1.810	13	33.385
Glen Dee Holdings	13	458	2.838	14.214	16	28.625
D. & J. McIntosh	10	652	1.534	8.667	15	43.467
Industry Totals	5207	194343	2.679	4.322	5862	33.153

GENERAL HAULAGE CONTRACTORS (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Duncan Adams	STIR	771	0.227	151	0.044	0.271	438
Charles Alexander	ABD	4268	0.408	3303	0.316	0.724	2955
Barbour European	STIR	166	0.080	43	0.021	0.100	269
George Beattie & Sons	GW	-	-	734	0.250	-	889
C.R.S. Transport	GW	-	-	1349	0.415	-	1668
Carntyne Transport Co.	GW	418	0.183	613	0.268	0.451	530
Connal & Co.	GW	-	-	13314	3.618	-	2248
Express Carriers	LTH	71	0.048	131	0.089	0.137	54
James Hemphill	GW	1849	0.335	3236	0.586	0.921	3628
Highland Haulage	HLAND	-	-	-	-	-	-
Andrew Hogg & Sons	GW	-	-	-	-	-	-
Inter-City Transport	GW	2774	0.377	3654	0.497	0.874	3095
Harry Lawson	PTH & KIN	2009	0.285	737	0.105	0.389	945
MacBrayne Haulage	GW	-	-	-	-	-	-
W.H. Malcolm	GW	4347	0.256	6770	0.399	0.655	6091
McKelvie & Co.	GW	1326	0.355	1022	0.274	0.629	1030
McPhersons Transport	ABD	765	0.308	1010	0.407	0.715	1028
N.E. Transport	ANGUS	-	-	-	-	-	-
J.M.Piggins	ANGUS	1212	0.294	1334	0.323	0.617	771
John G. Russell	LNK	1032	0.240	1867	0.435	0.675	1742
J. Russell (Grangemouth)	STIR	2271	0.317	3236	0.452	0.769	3580
Scottish Road Services	FLK	8531	0.347	9124	0.372	0.719	5131
Scottish Express	AYR	3005	0.433	2801	0.403	0.836	1562
Sutherlands Transpt. Svs.	ABD	2744	0.320	2441	0.285	0.605	2568
Utd. Transport Distribution	STIR	4177	0.339	6241	0.507	0.846	5944
William Carmicheal	-	-	-	-	-	-	-
Curries of Dumfries	-	-	-	-	-	-	-
Darroch & Newell	LNK	77	0.517	212	1.423	1.940	79
Freightline	ABD	-	-	-1	-0.001	-	69
C.Gamble & Son	DMF & GAL	94	0.347	84	0.310	0.657	58
William Grant (Haulage)	LNK	344	0.259	477	0.359	0.617	293
Hayton Coulthard	DMF & GAL	129	0.053	442	0.182	0.235	382
Percy Hull	GW	-	-	83	0.830	-	55
T.K. Road Transport Co.	-	-	-	-	-	-	-
Montogomery Transport	DMF & GAL	339	0.254	485	0.363	0.617	379
S. & H. Haulage	-	-	-	-	-	-	-
Spearmen's T. & T. Co.	GW	18	0.400	-15	-0.333	0.067	11
R.D. Spittal	-	-	-	-	-	-	-
Stevenson Brothers	-	-	-	-	-	-	-
J.S.L. Watson Haulage	-	-	-	-	-	-	-
Yuill & Dodds	LNK	1084	0.258	665	0.158	0.416	1837
John M. Young	DMF & GAL	290	0.367	247	0.313	0.679	188
J. & G. Campbell	GW	888	2.420	3039	8.281	10.700	1955
Dankin's Transport Svs.	FIFE	627	0.276	640	0.282	0.558	448
John Hutchison & Sons	FIFE	235	0.249	305	0.324	0.573	252
Industry Sub-Totals		45861	0.248	69774	0.378	0.626	52172

J.B. McBean	LTH	344	0.265	591	0.455	0.720	465
J. Moffats & Sons	-	-	-	-	-	-	-
Thomas Muir	FIFE	573	0.300	120	0.063	0.363	425
Adam Wishart & Sons	AYR	1442	1.118	5049	3.914	5.032	3180
M.A. Wilson & Sons	-	-	-	-	-	-	-
Saddler's Transport	LTH	17	0.156	13	0.119	0.275	21
Brora Transport	HLAND	-	-	25	0.132	-	34
Dyce Carriers	-	-	-	-	-	-	-
Glen Dee Holdings	ABD	-	-	305	0.666	-	227
D. & J. McIntosh	LTH	-	-	76	0.117	-	190
Industry Totals		48237	0.372	75953	0.676	1.030	56714

GENERAL HAULAGE CONTRACTORS (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Duncan Adams	5.544	1041	1257	0.828	4.9	8.0	12.9
Charles Alexander	6.640	2257	1909	1.182	3.0	50.7	-
Barbour European	20.692	688	914	0.753	-	-	44.6
George Beattie & Sons	28.677	509	664	0.767	0.2	13.2	-
C.R.S. Transport	19.395	389	708	0.549	2.2	49.4	-
Carntyne Transport Co.	11.277	415	332	1.250	0.0	3.8	-
Connal & Co.	17.426	11729	663	17.691	0.5	-	-
Express Carriers	7.714	374	297	1.259	1.4	-	-
James Hemphill	21.988	1087	1479	0.735	0.7	23.9	0.0
Highland Haulage	-	-	-	-	-	-	-
Andrew Hogg & Sons	-	-	-	-	128.7	-	-
Inter-City Transport	9.702	1696	1137	1.492	4.6	0.0	-
Harry Lawson	4.315	1400	1608	0.871	1.3	77.1	-
MacBrayne Haulage	-	-	-	-	-	-	-
W.H. Malcolm	13.043	5391	4712	1.144	3.9	11.4	-
McKelvie & Co.	8.957	885	893	0.991	-	-	-
McPhersons Transport	16.317	672	690	0.974	-	-	-
N.E. Transport	-	-	-	-	-	-	-
J.M.Piggins	9.638	1616	1053	1.535	0.2	-	-
John G. Russell	13.504	1539	1414	1.088	0.6	65.4	-
J. Russell (Grangemouth)	18.842	1541	1885	0.818	8.9	38.5	-
Scottish Road Services	5.614	7949	3956	2.009	0.6	-	0.0
Scottish Express	4.450	5603	4364	1.284	0.0	-	13.2
Sutherlands Transpt. Svs.	9.839	1695	1822	0.930	2.1	0.0	-
Utd. Transport Distribution	11.609	-	-	-	3.2	-	-
William Carmicheal	-	-	-	-	-	-	-
Curries of Dumfries	-	-	-	-	-	-	-
Darroch & Newell	9.875	172	39	4.410	-	-	-
Freightline	3.833	255	325	0.785	-	-	-
C.Gamble & Son	5.800	115	89	1.292	-	-	-
William Grant (Haulage)	8.879	539	355	1.518	-	-	-
Hayton Coulthard	25.467	535	475	1.126	-	-	-
Percy Hull	18.333	83	55	1.509	-	-	-
T.K. Road Transport Co.	-	-	-	-	-	-	-
Montogomery Transport	10.243	566	460	1.230	-	-	-
S. & H. Haulage	-	-	-	-	-	-	-
Spearmen's T. & T. Co.	2.200	12	38	0.316	-	-	-
R.D. Spittal	-	-	-	-	-	-	-
Stevenson Brothers	-	-	-	-	-	-	-
J.S.L. Watson Haulage	-	-	-	-	-	-	-
Yuill & Dodds	22.133	1012	2184	0.463	6.9	6.0	0.0
John M. Young	5.529	176	117	1.504	-	-	-
J. & G. Campbell	162.917	1452	368	3.946	-	-	-
Dankin's Transport Svs.	6.892	877	685	1.280	-	-	-
John Hutchison & Sons	9.333	312	259	1.205	-	-	-
Industry Sub-Totals		53541	37206				

J.B. McBean	11.071	677	551	1.229	-	-	-
J. Moffats & Sons	-	-	-	-	-	-	-
Thomas Muir	5.667	888	1193	0.744	-	-	-
Adam Wishart & Sons	117.778	3169	1300	2.438	-	-	-
M.A. Wilson & Sons	-	-	-	-	-	-	-
Saddler's Transport	10.500	54	62	0.871	-	-	-
Brora Transport	5.667	64	73	0.877	-	-	-
Dyce Carriers	-	-	-	-	-	-	-
Glen Dee Holdings	14.188	258	180	1.433	-	-	-
D. & J. McIntosh	12.667	409	523	0.782	-	-	-
Industry Totals	17.906	59060	41088	1.678	8.7	26.7	11.8

GENERAL HAULAGE CONTRACTORS (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Duncan Adams	192	3571	5.377	4.999	82	43.549
Charles Alexander	137	11237	1.219	7.500	461	24.375
Barbour European	58	2271	2.554	9.078	14	162.214
George Beattie & Sons	80	2211	3.618	-24.745	31	71.323
C.R.S. Transport	275	4349	6.323	33.733	103	42.223
Carntyne Transport Co.	47	2341	2.008	2.316	48	48.771
Connal & Co.	212	4926	4.304	33.859	216	22.806
Express Carriers	0	1359	0.000	-8.114	7	194.143
James Hemphill	218	5195	4.196	-5.939	159	32.673
Highland Haulage	142	2665	5.328	12.733	110	24.227
Andrew Hogg & Sons	51	4692	1.087	11.422	108	43.444
Inter-City Transport	612	8886	6.887	20.849	340	26.135
Harry Lawson	1	6532	0.015	-7.374	207	31.556
MacBrayne Haulage	-68	5527	-1.230	61.940	179	30.877
W.H. Malcolm	1952	20160	9.683	18.756	503	40.080
McKelvie & Co.	208	3846	5.408	2.972	111	34.649
McPhersons Transport	323	2646	12.207	6.608	64	41.344
N.E. Transport	-42	1751	-2.399	63.340	34	51.500
J.M.Piggins	406	4382	9.265	6.153	80	54.775
John G. Russell	168	4716	3.562	9.777	123	38.341
J. Russell (Grangemouth)	621	7771	7.991	8.549	201	38.662
Scottish Road Services	11	38542	0.029	56.987	914	42.168
Scottish Express	458	9800	4.673	41.088	387	25.323
Sutherlands Transpt. Svs.	-36	9188	-0.392	7.224	261	35.203
Utd. Transport Distribution	-14	67	-20.896	-	4	16.750
William Carmicheal	44	246	17.886	-5.747	23	10.696
Curries of Dumfries	474	12450	3.807	5.607	113	110.177
Darroch & Newell	-13	200	-6.500	34.228	10	20.000
Freightline	50	1367	3.658	22.821	13	105.154
C.Gamble & Son	16	298	5.369	9.963	10	29.800
William Grant (Haulage)	85	1220	6.967	-8.271	33	36.970
Hayton Coulthard	71	3085	2.301	27.112	17	181.471
Percy Hull	-9	99	-9.091	-1.000	3	33.000
T.K. Road Transport Co.	39	700	5.571	13.636	16	43.750
Montogomery Transport	134	1583	8.465	18.488	40	39.575
S. & H. Haulage	-67	508	-13.189	-1.931	19	26.737
Spearmen's T. & T. Co.	8	64	12.500	42.222	6	10.667
R.D. Spittal	56	1098	5.100	-29.253	40	27.450
Stevenson Brothers	-4	2745	-0.146	12.916	55	49.909
J.S.L. Watson Haulage	35	444	7.883	33.333	20	22.200
Yuill & Dodds	39	3787	1.030	-10.026	80	47.338
John M. Young	40	481	8.316	-39.114	35	13.743
J. & G. Campbell	-1	331	-0.302	-9.809	11	30.091
Dankin's Transport Svs.	-14	2722	-0.514	19.859	69	39.449
John Hutchison & Sons	-46	883	-5.210	-6.263	28	31.536
Industry Sub-Totals	6949	202942			5388	

J.B. McBean	108	1404	7.692	8.083	35	40.114
J. Moffats & Sons	101	1566	6.450	-9.006	45	34.800
Thomas Muir	-84	2062	-4.074	8.128	75	27.493
Adam Wishart & Sons	89	1433	6.211	11.085	27	53.074
M.A. Wilson & Sons	14	1318	1.062	-22.879	42	31.381
Saddler's Transport	2	107	1.869	-1.835	3	35.667
Brora Transport	-6	214	-2.804	12.632	6	35.667
Dyce Carriers	18	451	3.991	3.917	14	32.214
Glen Dee Holdings	19	670	2.836	46.288	20	33.500
D. & J. McIntosh	78	805	9.689	23.466	15	53.667
Industry Totals	7288	212972	3.422	9.586	5670	37.561

GENERAL HAULAGE CONTRACTORS (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Duncan Adams	STIR	854	0.239	232	0.065	0.304	426
Charles Alexander	ABD	4789	0.426	4307	0.383	0.809	3352
Barbour European	STIR	172	0.076	116	0.051	0.127	282
George Beattie & Sons	GW	-	-	750	0.339	-	844
C.R.S. Transport	GW	-	-	2157	0.496	-	2572
Carntyne Transport Co.	GW	482	0.206	613	0.262	0.468	600
Connal & Co.	GW	-	-	14690	2.982	-	2947
Express Carriers	LTH	73	0.054	129	0.095	0.149	60
James Hemphill	GW	1844	0.355	2822	0.543	0.898	3719
Highland Haulage	HLAND	-	-	-	-	-	-
Andrew Hogg & Sons	GW	-	-	-	-	-	-
Inter-City Transport	GW	3196	0.360	3896	0.438	0.798	3872
Harry Lawson	PTH & KIN	2053	0.314	738	0.113	0.427	803
MacBrayne Haulage	GW	-	-	-	-	-	-
W H. Malcolm	GW	4991	0.248	7445	0.369	0.617	6588
McKelvie & Co.	GW	1316	0.342	1049	0.273	0.615	1133
McPhersons Transport	ABD	865	0.327	1292	0.488	0.815	1198
N E. Transport	ANGUS	-	-	-	-	-	-
J.M.Piggins	ANGUS	1324	0.302	1600	0.365	0.667	808
John G. Russell	LNK	1136	0.241	1803	0.382	0.623	1661
J. Russell (Grangemouth)	STIR	2495	0.321	3354	0.432	0.753	3674
Scottish Road Services	FLK	8813	0.229	8345	0.217	0.445	5239
Scottish Express	AYR	3463	0.353	2892	0.295	0.648	1670
Sutherlands Transpt. Svs.	ABD	2959	0.322	2311	0.252	0.574	2485
Utd. Transport Distribution	GW	30	0.448	28	0.418	0.866	22
William Carmicheal	-	-	-	-	-	-	-
Curries of Dumfries	-	-	-	-	-	-	-
Darroch & Newell	LNK	83	0.415	120	0.600	1.015	74
Freightline	ABD	-	-	-26	-0.019	-	62
C.Gamble & Son	DMF & GAL	114	0.383	94	0.315	0.698	61
William Grant (Haulage)	LNK	380	0.311	530	0.434	0.746	328
Hayton Coulthard	DMF & GAL	171	0.055	490	0.159	0.214	389
Percy Hull	GW	-	-	88	0.889	-	49
T.K. Road Transport Co.	-	-	-	-	-	-	-
Montogomery Transport	DMF & GAL	-	-	532	0.336	-	402
S. & H. Haulage	-	-	-	-	-	-	-
Spearmen's T. & T. Co.	GW	18	0.281	-7	-0.109	0.172	12
R.D Spittal	-	-	-	-	-	-	-
Stevenson Brothers	-	-	-	-	-	-	-
J.S.L. Watson Haulage	-	-	-	-	-	-	-
Yuill & Dodds	LNK	912	0.241	564	0.149	0.390	1894
John M. Young	DMF & GAL	331	0.687	237	0.493	1.180	176
J. & G. Campbell	GW	940	2.840	3113	9.405	12.245	2338
Dankin's Transport Svs.	FIFE	707	0.260	712	0.262	0.521	510
John Hutchison & Sons	FIFE	239	0.271	241	0.273	0.544	266
Industry Sub-Totals		44749		67257			50516

J.B. McBean	LTH	371	0.264	589	0.420	0.684	439
J. Moffats & Sons	-	-	-	-	-	-	-
Thomas Muir	FIFE	613	0.297	85	0.041	0.338	446
Adam Wishart & Sons	AYR	1574	1.098	5061	3.532	4.630	3520
M.A. Wilson & Sons	-	-	-	-	-	-	-
Saddler's Transport	LTH	27	0.252	14	0.131	0.383	19
Brora Transport	HLAND	-	-	25	0.117	-	32
Dyce Carriers	-	-	-	-	-	-	-
Glen Dee Holdings	ABD	128	0.191	328	0.490	0.681	208
D. & J. McIntosh	LTH	-	-	134	0.166	-	216
Industry Totals		47462	0.394	73493	0.667	1.062	55396

GENERAL HAULAGE CONTRACTORS (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Duncan Adams	5.195	1063	1257	0.846	5.5	8.9	15.1
Charles Alexander	7.271	3253	2298	1.416	2.6	-	-
Barbour European	20.143	676	842	0.803	-	-	42.7
George Beattie & Sons	27.226	613	707	0.867	0.2	15.9	-
C.R.S. Transport	24.971	1333	1748	0.763	-	-	-
Carntyne Transport Co.	12.500	482	469	1.028	0.0	-	-
Connal & Co.	13.644	12169	426	28.566	0.6	-	-
Express Carriers	8.571	422	353	1.195	1.5	-	-
James Hemphill	23.390	643	1540	0.418	1.5	14.7	0.0
Highland Haulage	-	-	-	-	-	-	-
Andrew Hogg & Sons	-	-	-	-	-	-	-
Inter-City Transport	11.388	1979	1955	1.012	4.9	-	-
Harry Lawson	3.879	1399	1464	0.956	1.0	98.4	-
MacBrayne Haulage	-	-	-	-	-	-	-
W.H. Malcolm	13.097	7059	6202	1.138	4.5	16.6	-
McKelvie & Co.	10.207	999	1083	0.922	-	-	-
McPhersons Transport	18.719	780	686	1.137	-	-	-
N.E. Transport	-	-	-	-	-	-	-
J.M.Piggins	10.100	1780	988	1.802	0.2	-	-
John G. Russell	13.504	1456	1314	1.108	0.3	18.8	-
J. Russell (Grangemouth)	18.279	2184	2504	0.872	-	-	-
Scottish Road Services	5.732	9559	6453	1.481	0.5	-	0.0
Scottish Express	4.315	7234	6012	1.203	0.1	-	-
Sutherlands Transpt. Svs.	9.521	1748	1922	0.909	-	-	-
Utd. Transport Distribution	5.500	35	29	1.207	-	-	-
William Carmicheal	-	-	-	-	-	-	-
Curries of Dumfries	-	-	-	-	-	-	-
Darroch & Newell	7.400	97	51	1.902	-	-	-
Freightline	4.769	218	306	0.712	-	-	-
C.Gamble & Son	6.100	102	69	1.478	-	-	-
William Grant (Haulage)	9.939	649	447	1.452	-	-	-
Hayton Coulthard	22.882	836	735	1.137	-	-	-
Percy Hull	16.333	90	51	1.765	-	-	-
T.K. Road Transport Co.	-	-	-	-	-	-	-
Montogomery Transport	10.050	597	467	1.278	-	-	-
S. & H. Haulage	-	-	-	-	-	-	-
Spearmen's T. & T. Co.	2.000	19	38	0.500	-	-	-
R.D. Spittal	-	-	-	-	-	-	-
Stevenson Brothers	-	-	-	-	-	-	-
J.S.L. Watson Haulage	-	-	-	-	-	-	-
Yuill & Dodds	23.675	875	2205	0.397	6.2	11.4	0.0
John M. Young	5.029	236	175	1.349	-	-	-
J. & G. Campbell	212.545	1380	605	2.281	-	-	-
Dankin's Transport Svs.	7.391	1185	983	1.205	-	-	-
John Hutchison & Sons	9.500	370	395	0.937	-	-	-
Industry Sub-Totals		40887	46779	0.874			

J.B. McBean	12.543	729	579	1.259	-	-	-
J. Moffats & Sons	-	-	-	-	-	-	-
Thomas Muir	5.947	1208	1569	0.770	-	-	-
Adam Wishart & Sons	130.370	3141	1600	1.963	-	-	-
M.A. Wilson & Sons	-	-	-	-	-	-	-
Saddler's Transport	6.333	28	33	0.848	-	-	-
Brora Transport	5.333	108	115	0.939	-	-	-
Dyce Carriers	-	-	-	-	-	-	-
Glen Dee Holdings	10.400	366	246	1.488	-	-	-
D. & J. McIntosh	14.400	131	213	0.615	-	-	-
Industry Totals	19.271	46598	51134	1.781	2.0	26.4	11.6

GENERAL HAULAGE CONTRACTORS (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Duncan Adams	241	4159	5.795	16.466	95	43.779
Charles Alexander	-235	12060	-1.949	7.324	469	25.714
Barbour European	88	2301	3.824	1.321	15	153.400
George Beattie & Sons	842	4000	21.050	80.914	42	95.238
C.R.S. Transport	122	5475	2.228	25.891	106	51.651
Carntyne Transport Co.	71	2351	3.020	0.427	44	53.432
Connal & Co.	-309	4703	-6.570	-4.527	201	23.398
Express Carriers	2	1387	0.144	2.060	7	198.143
James Hemphill	423	6509	6.499	25.294	173	37.624
Highland Haulage	111	2643	4.200	-0.826	110	24.027
Andrew Hogg & Sons	60	5102	1.176	8.738	112	45.554
Inter-City Transport	1050	11109	9.452	25.017	400	27.773
Harry Lawson	14	6927	0.202	6.047	202	34.292
MacBrayne Haulage	111	6949	1.597	25.728	174	39.937
W H. Malcolm	1899	22057	8.610	9.410	545	40.472
McKelvie & Co.	84	4248	1.977	10.452	113	37.593
McPhersons Transport	384	2996	12.817	13.228	68	44.059
N.E. Transport	23	737	3.121	-57.910	28	26.321
J.M.Piggins	291	3811	7.636	-13.031	80	47.638
John G. Russell	225	4674	4.814	-0.891	125	37.392
J. Russell (Grangemouth)	942	9669	9.742	24.424	236	40.970
Scottish Road Services	1380	44458	3.104	15.349	982	45.273
Scottish Express	470	12965	3.625	32.296	471	27.527
Sutherlands Transpt. Svs.	-133	10224	-1.301	11.276	257	39.782
Utd. Transport Distribution	-6	60	-10.000	-10.448	3	20.000
William Carmichcal	28	251	11.155	2.033	26	9.654
Curries of Dumfries	467	17049	2.739	36.940	158	107.905
Darroch & Newell	-3	242	-1.240	21.000	9	26.889
Freightline	79	1399	5.647	2.341	13	107.615
C.Gamble & Son	-2	258	-0.775	-13.423	9	28.667
William Grant (Haulage)	-61	1110	-5.495	-9.016	29	38.276
Hayton Coulthard	91	3457	2.632	12.058	29	119.207
Percy Hull	4	142	2.817	43.434	3	47.333
T.K. Road Transport Co.	24	801	2.996	14.429	19	42.158
Montogomery Transport	154	1655	9.305	4.548	47	35.213
S. & H. Haulage	-45	586	-7.679	15.354	19	30.842
Spearmen's T. & T. Co.	1	62	1.613	-3.125	6	10.333
R.D. Spittal	37	2059	1.797	87.523	45	45.756
Stevenson Brothers	94	3649	2.576	32.933	68	53.662
J.S.L. Watson Haulage	37	485	7.629	9.234	20	24.250
Yuill & Dodds	82	4259	1.925	12.464	83	51.313
John M. Young	150	910	16.484	89.189	35	26.000
J. & G. Campbell	23	367	6.267	10.876	11	33.364
Dankin's Transport Svs.	-1	2951	-0.034	8.413	72	40.986
John Hutchison & Sons	33	858	3.846	-2.831	23	37.304
Industry Sub-Totals	9342	234124			5782	

J.B. McBean	-31	1396	-2.221	-0.570	34	41.059
J. Moffats & Sons	73	1781	4.099	13.729	45	39.578
Thomas Muir	-85	2111	-4.027	2.376	75	28.147
Adam Wishart & Sons	74	1441	5.135	0.558	29	49.690
M.A. Wilson & Sons	66	1536	4.297	16.540	40	38.400
Saddler's Transport	4	132	3.030	23.364	3	44.000
Brora Transport	9	227	3.965	6.075	6	37.833
Dyce Carriers	31	448	6.920	-0.665	15	29.867
Glen Dee Holdings	34	897	3.790	33.881	22	40.773
D. & J. McIntosh	25	858	2.914	6.584	18	47.667
Industry Totals	9542	244951	3.895	15.016	6069	40.361

GENERAL HAULAGE CONTRACTORS (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Duncan Adams	STIR	717	0.172	272	0.065	0.238	488
Charles Alexander	ABD	4092	0.339	3408	0.283	0.622	3058
Barbour European	STIR	175	0.076	15	0.006	0.083	216
George Beattie & Sons	GW	-	-	660	0.165	-	775
C.R.S. Transport	GW	-	-	936	0.171	-	1194
Carntyne Transport Co.	GW	494	0.210	625	0.266	0.476	575
Connal & Co.	GW	643	0.137	6452	1.372	1.509	1750
Express Carriers	LTH	66	0.048	125	0.090	0.138	53
James Hemphill	GW	1670	0.257	2874	0.442	0.698	3152
Highland Haulage	HLAND	-	-	-	-	-	-
Andrew Hogg & Sons	GW	-	-	-	-	-	-
Inter-City Transport	GW	2501	0.225	3676	0.331	0.556	3247
Harry Lawson	PTH & KIN	1853	0.268	656	0.095	0.362	816
MacBrayne Haulage	GW	-	-	-	-	-	-
W.H. Malcolm	GW	3946	0.179	6377	0.289	0.468	6129
McKelvie & Co.	GW	1529	0.360	1482	0.349	0.709	1281
McPhersons Transport	ABD	645	0.215	1099	0.367	0.582	986
N.E. Transport	ANGUS	-	-	-	-	-	-
J.M.Piggins	ANGUS	1141	0.299	1138	0.299	0.598	666
John G. Russell	LNK	1001	0.214	1716	0.367	0.581	1573
J. Russell (Grangemouth)	STIR	1827	0.189	3002	0.311	0.500	3078
Scottish Road Services	FLK	7266	0.163	8786	0.198	0.361	4136
Scottish Express	AYR	2661	0.205	2592	0.200	0.405	1195
Sutherlands Transpt. Svs.	ABD	2523	0.247	2790	0.273	0.520	2589
Utd. Transport Distribution	GW	23	0.383	22	0.367	0.750	19
William Carmicheal	-	-	-	-	-	-	-
Curries of Dumfries	-	-	-	-	-	-	-
Darroch & Newell	LNK	100	0.413	115	0.475	0.888	90
Freightline	ABD	-	-	26	0.019	-	73
C.Gamble & Son	DMF & GAL	-	-	-	-	-	-
William Grant (Haulage)	LNK	318	0.286	521	0.469	0.756	320
Hayton Coulthard	DMF & GAL	229	0.066	542	0.157	0.223	399
Percy Hull	GW	-	-	-	-	-	-
T.K. Road Transport Co.	-	-	-	-	-	-	-
Montogomery Transport	DMF & GAL	-	-	-	-	-	-
S. & H. Haulage	-	-	-	-	-	-	-
Spearmen's T. & T. Co.	GW	28	0.452	-7	-0.113	0.339	12
R.D. Spittal	-	-	-	-	-	-	-
Stevenson Brothers	-	-	-	-	-	-	-
J.S.L. Watson Haulage	-	-	-	-	-	-	-
Yuill & Dodds	LNK	1029	0.242	1626	0.382	0.623	1922
John M. Young	DMF & GAL	-	-	-	-	-	-
J. & G. Campbell	GW	1040	2.834	3198	8.714	11.548	2417
Dankin's Transport Svs.	FIFE	-	-	-	-	-	-
John Hutchison & Sons	FIFE	-	-	-	-	-	-

Industry Sub-Totals

J.B. McBean	LTH	-	-	-	-	-	-
J. Moffats & Sons	-	-	-	-	-	-	-
Thomas Muir	FIFE	-	-	-	-	-	-
Adam Wishart & Sons	AYR	-	-	-	-	-	-
M.A. Wilson & Sons	-	-	-	-	-	-	-
Saddler's Transport	LTH	-	-	-	-	-	-
Brora Transport	HLAND	-	-	32	0.141	-	35
Dyce Carriers	-	-	-	-	-	-	-
Glen Dee Holdings	ABD	208	0.232	306	0.341	0.573	185
D. & J. McIntosh	LTH	-	-	40	0.047	-	180
Industry Totals			0.335		0.546	0.966	

GENERAL HAULAGE CONTRACTORS (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Duncan Adams	5.133	845	1047	0.807	-	-	-
Charles Alexander	6.520	2243	1892	1.185	-	-	-
Barbour European	14.387	583	784	0.744	-	-	-
George Beattie & Sons	18.448	495	610	0.812	-	-	-
C.R.S. Transport	11.260	585	842	0.694	-	-	-
Carntyne Transport Co.	13.068	495	445	1.112	-	-	-
Connal & Co.	8.704	5115	413	12.392	-	-	-
Express Carriers	7.543	352	279	1.260	-	-	-
James Hemphill	18.218	1121	1410	0.795	-	-	-
Highland Haulage	-	-	-	-	-	-	-
Andrew Hogg & Sons	-	-	-	-	-	-	-
Inter-City Transport	8.118	1648	1219	1.352	-	-	-
Harry Lawson	4.038	1337	1496	0.893	-	-	-
MacBrayne Haulage	-	-	-	-	-	-	-
W.H. Malcolm	11.246	5604	5356	1.046	-	-	-
McKelvie & Co.	11.335	1066	864	1.233	-	-	-
McPhersons Transport	14.494	581	468	1.242	-	-	-
N.E. Transport	-	-	-	-	-	-	-
J.M.Piggins	8.330	1420	948	1.498	-	-	-
John G. Russell	12.581	1269	1125	1.128	-	-	-
J. Russell (Grangemouth)	13.044	1502	1578	0.952	-	-	-
Scottish Road Services	4.212	9096	4556	1.996	-	-	-
Scottish Express	2.536	5580	4183	1.334	-	-	-
Sutherlands Transpt. Svs.	10.073	1855	1654	1.122	-	-	-
Utd. Transport Distribution	6.333	25	22	1.136	-	-	-
William Carmicheal	-	-	-	-	-	-	-
Curries of Dumfries	-	-	-	-	-	-	-
Darroch & Newell	10.000	271	246	1.102	-	-	-
Freightline	5.615	286	333	0.859	-	-	-
C.Gamble & Son	-	-	-	-	-	-	-
William Grant (Haulage)	11.034	523	322	1.624	-	-	-
Hayton Coulthard	13.759	895	752	1.190	-	-	-
Percy Hull	-	-	-	-	-	-	-
T.K. Road Transport Co.	-	-	-	-	-	-	-
Montogomery Transport	-	-	-	-	-	-	-
S. & H. Haulage	-	-	-	-	-	-	-
Spearmen's T. & T. Co.	2.000	17	36	0.472	-	-	-
R.D. Spittal	-	-	-	-	-	-	-
Stevenson Brothers	-	-	-	-	-	-	-
J.S.L. Watson Haulage	-	-	-	-	-	-	-
Yuill & Dodds	23.157	1159	1455	0.797	-	-	-
John M. Young	-	-	-	-	-	-	-
J. & G. Campbell	219.727	1500	719	2.086	-	-	-
Dankin's Transport Svs.	-	-	-	-	-	-	-
John Hutchison & Sons	-	-	-	-	-	-	-
Industry Sub-Totals		47468	35055				

J.B McBean	-	-	-	-	-	-	-
J. Moffats & Sons	-	-	-	-	-	-	-
Thomas Muir	-	-	-	-	-	-	-
Adam Wishart & Sons	-	-	-	-	-	-	-
M.A. Wilson & Sons	-	-	-	-	-	-	-
Saddler's Transport	-	-	-	-	-	-	-
Brora Transport	5.833	149	152	0.980	-	-	-
Dyce Carriers	-	-	-	-	-	-	-
Glen Dee Holdings	8.409	409	288	1.420	-	-	-
D. & J. McIntosh	10.000	381	521	0.731	-	-	-
Industry Totals	16.747	48407	36016	1.484	-	-	-

APPENDIX 6 : Industrial Rubber Manufacture

Firm Data (1983-88)

Contents :

- Profit
- Turnover
- Profit-Sales Ratio (PSR %)
- Annual Sales Growth (Sales %)
- Number of Employees (Emp.)
- Average Revenue Product (ARP)
- Location Code
- Wage Bill
- Input-Output Ratio for Labour
- Capital Employed
- Input Output Ratio for Capital
- Input Output Ratio (Total)
- Fixed Assets (Fx. Ass.)
- Fixed Assets per Employee (FA/L)
- Current Assets
- Current Liabilities
- Current Ratio (CR)
- Borrowing Ratio (Borrow)
- Income Gearing (Inc. Gr.)
- Export Ratio (XR)

INDUSTRIAL RUBBER MANUFACTURE (1983)

Firms	Profit	Turnover	PSR(%)	Emp.	ARP
Dayco Rubber	-693	5820	-11.907	263	22.129
Flexible Ducting	-88	4308	-2.043	182	23.670
MacLellan Rubber	675	8353	8.081	327	25.544
H.K. Porter Co.	184	3105	5.926	112	27.723
UniRoyal	4561	69280	6.583	1253	55.291
Day International	465	9134	5.091	256	35.680
Industry Totals	5104	100000	5.104	2393	41.789

INDUSTRIAL RUBBER MANUFACTURE (1984)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
Dayco Rubber	-740	5964	-12.408	2.474	260	22.938
Flexible Ducting	172	4070	4.226	-5.525	133	30.602
MacLellan Rubber	427	7261	5.881	-13.073	309	23.498
H.K. Porter Co.	139	3684	3.773	18.647	105	35.086
UniRoyal	3462	71005	4.876	2.490	1101	64.491
Day International	365	8884	4.109	-2.737	255	34.839
Industry Totals	3825	100868	3.792	0.868	2163	46.633

INDUSTRIAL RUBBER MANUFACTURE (1985)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
Dayco Rubber	-574	7004	-8.195	17.438	254	27.575
Flexible Ducting	513	4259	12.045	4.644	131	32.511
MacLellan Rubber	510	8405	6.068	15.755	306	27.467
H.K. Porter Co.	-64	3452	-1.854	-6.298	104	33.192
UniRoyal	3123	80700	3.870	13.654	1047	77.077
Day International	67	8326	0.805	-6.281	231	36.043
Industry Totals	3575	112146	3.188	11.181	2073	54.098

INDUSTRIAL RUBBER MANUFACTURE (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Dayco Rubber	PTH & KIN	1736	0.298	3576	0.614	0.913	1314
Flexible Ducting	GW	1247	0.289	1341	0.311	0.601	659
MacLellan Rubber	GW	2478	0.297	2884	0.345	0.642	975
H.K. Porter Co.	STIR	829	0.267	1178	0.379	0.646	675
UniRoyal	DMF & GAL	9255	0.134	16315	0.235	0.369	6525
Day International	PTH & KIN	1750	0.192	3576	0.392	0.583	1611
Industry Totals		17295	0.246	28870	0.380	0.626	11759

INDUSTRIAL RUBBER MANUFACTURE (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Dayco Rubber	PTH & KIN	1797	0.301	2925	0.490	0.792	1746
Flexible Ducting	GW	999	0.245	1149	0.282	0.528	352
MacLellan Rubber	GW	2440	0.336	2924	0.403	0.739	872
H.K. Porter Co.	STIR	851	0.231	1340	0.364	0.595	970
UniRoyal	DMF & GAL	10393	0.146	14918	0.210	0.356	8084
Day International	PTH & KIN	1797	0.202	2925	0.329	0.532	1746
Industry Totals		18277	0.244	26181	0.346	0.590	13770

INDUSTRIAL RUBBER MANUFACTURE (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Dayco Rubber	PTH & KIN	2058	0.294	2334	0.333	0.627	1631
Flexible Ducting	GW	1086	0.255	876	0.206	0.461	258
MacLellan Rubber	GW	2575	0.306	2735	0.325	0.632	920
H.K. Porter Co.	STIR	886	0.257	1327	0.384	0.641	1029
UniRoyal	DMF & GAL	11059	0.137	18785	0.233	0.370	9469
Day International	PTH & KIN	2058	0.247	2334	0.280	0.528	1631
Industry Totals		19722	0.249	28391	0.294	0.543	14938

INDUSTRIAL RUBBER MANUFACTURE (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Dayco Rubber	4.996	3586	1621	2.212	0.2	-	67.5
Flexible Ducting	3.621	1491	809	1.843	0.8	-	42.2
MacLellan Rubber	2.982	3841	1932	1.988	1.8	15.5	17.3
H.K. Porter Co.	6.027	1299	796	1.632	0.2	6.1	-
UniRoyal	5.208	34776	24986	1.392	0.4	1.7	-
Day International	6.293	3586	1621	2.212	0.2	-	67.5
Industry Totals	4.854	48579	31765	1.880	0.6	7.8	48.6

INDUSTRIAL RUBBER MANUFACTURE (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Dayco Rubber	6.715	2919	1740	1.678	0.3	-	69.3
Flexible Ducting	2.647	1349	552	2.444	0.6	10.9	40.7
MacLellan Rubber	2.822	3076	1024	3.004	1.9	16.6	19.2
H.K. Porter Co.	9.238	1334	964	1.384	0.2	4.8	-
UniRoyal	7.342	27615	20781	1.329	0.9	7.2	-
Day International	6.847	2919	1740	1.678	0.3	-	69.3
Industry Totals	5.935	39212	26801	1.919	0.7	9.9	49.6

INDUSTRIAL RUBBER MANUFACTURE (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Dayco Rubber	6.421	3542	2839	1.248	0.8	-	74.1
Flexible Ducting	1.969	1726	1108	1.558	0.2	2.3	34.2
MacLellan Rubber	3.007	3587	1772	2.024	1.7	20.2	19.0
H.K. Porter Co.	9.894	1377	1079	1.276	0.2	-	-
UniRoyal	9.044	21917	12601	1.739	0.2	1.7	-
Day International	7.061	3542	2839	1.248	0.8	-	74.1
Industry Totals	6.233	35691	22238	1.515	0.7	8.1	50.4

INDUSTRIAL RUBBER MANUFACTURE (1986)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
Dayco Rubber	-156	6449	-2.419	-7.924	241	26.759
Flexible Ducting	394	4777	8.248	12.162	144	33.174
MacLellan Rubber	416	8428	4.936	0.274	272	30.985
H.K. Porter Co.	114	2857	3.990	-17.236	93	30.720
UniRoyal	3554	76755	4.630	-4.888	1223	62.760
Day International	-420	7440	-5.645	-10.641	228	32.632
Industry Totals	3902	106706	3.657	-4.851	2201	48.481

INDUSTRIAL RUBBER MANUFACTURE (1987)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
Dayco Rubber	-212	6808	-3.114	5.567	229	29.729
Flexible Ducting	468	5438	8.606	13.837	152	35.776
MacLellan Rubber	1101	9401	11.712	11.545	303	31.026
H.K. Porter Co.	155	3315	4.676	16.031	100	33.150
UniRoyal	6742	92101	7.320	19.993	1318	69.879
Day International	342	6207	5.510	-16.573	217	28.604
Industry Totals	8596	123270	6.973	15.523	2319	53.157

INDUSTRIAL RUBBER MANUFACTURE (1988)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
Dayco Rubber	140	7981	1.754	17.230	224	35.629
Flexible Ducting	821	6609	12.422	21.534	156	42.365
MacLellan Rubber	859	10012	8.580	6.499	298	33.597
H.K. Porter Co.	21	3771	0.557	13.756	98	38.480
UniRoyal	5211	90100	5.784	-2.173	1297	69.468
Day International	975	10563	9.230	70.179	235	44.949
Industry Totals	8027	129036	6.221	4.678	2308	55.908

INDUSTRIAL RUBBER MANUFACTURE (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Dayco Rubber	PTH & KIN	1905	0.295	2258	0.350	0.646	1735
Flexible Ducting	GW	1332	0.279	1054	0.221	0.499	446
MacLellan Rubber	GW	2570	0.305	2737	0.325	0.630	902
H.K. Porter Co.	STIR	-	-	-	-	-	-
UniRoyal	DMF & GAL	-	-	-	-	-	-
Day International	PTH & KIN	1905	0.256	2258	0.303	0.560	1735
Industry Totals		7712	0.284	8307	0.300	0.584	4818

INDUSTRIAL RUBBER MANUFACTURE (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Dayco Rubber	PTH & KIN	1790	0.263	3990	0.586	0.849	1750
Flexible Ducting	GW	1482	0.273	1065	0.196	0.468	352
MacLellan Rubber	GW	3043	0.324	2834	0.301	0.625	967
H.K. Porter Co.	STIR	-	-	-	-	-	-
UniRoyal	DMF & GAL	-	-	-	-	-	-
Day International	PTH & KIN	1790	0.288	3990	0.643	0.931	1750
Industry Totals		8105	0.287	11879	0.432	0.718	4819

INDUSTRIAL RUBBER MANUFACTURE (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Dayco Rubber	PTH & KIN	1857	0.233	3017	0.378	0.611	1635
Flexible Ducting	GW	1229	0.186	1097	0.166	0.352	413
MacLellan Rubber	GW	2621	0.262	2822	0.282	0.544	927
H.K. Porter Co.	STIR	-	-	-	-	-	-
UniRoyal	DMF & GAL	-	-	-	-	-	-
Day International	PTH & KIN	1857	0.176	3017	0.286	0.461	1635
Industry Totals		7564	0.214	9952	0.278	0.492	4611

INDUSTRIAL RUBBER MANUFACTURE (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Dayco Rubber	7.199	3471	2948	1.177	0.8	-	71.0
Flexible Ducting	3.097	1640	1032	1.589	0.2	-	40.1
MacLellan Rubber	3.316	3308	1473	2.246	1.8	22.1	18.8
H.K. Porter Co.	-	-	-	-	-	-	-
UniRoyal	-	-	-	-	-	-	-
Day International	7.610	3471	2948	1.177	0.8	-	71.0
Industry Totals	5.306	11890	8401	1.547	0.9	22.1	50.2

INDUSTRIAL RUBBER MANUFACTURE (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Dayco Rubber	7.642	4038	1798	2.246	0.8	-	72.5
Flexible Ducting	2.316	1837	1124	1.634	0.2	-	38.9
MacLellan Rubber	3.191	4168	2301	1.811	1.9	21.8	18.4
H.K. Porter Co.	-	-	-	-	-	-	-
UniRoyal	-	-	-	-	-	-	-
Day International	8.065	4038	1798	2.246	0.8	-	72.5
Industry Totals	5.303	14081	7021	1.984	0.925	21.8	50.6

INDUSTRIAL RUBBER MANUFACTURE (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Dayco Rubber	7.300	3511	2189	1.604	-	-	-
Flexible Ducting	2.650	1609	925	1.739	-	-	-
MacLellan Rubber	3.111	3596	1700	2.115	-	-	-
H.K. Porter Co.	-	-	-	-	-	-	-
UniRoyal	-	-	-	-	-	-	-
Day International	6.957	3511	2189	1.604	-	-	-
Industry Totals	5.005	12227	7004	1.765	-	-	-

APPENDIX 7 : Industrial Valves Manufacture

Firm Data (1983-88)

Contents :

Profit
Turnover
Profit-Sales Ratio (PSR %)
Annual Sales Growth (Sales %)
Number of Employees (Emp.)
Average Revenue Product (ARP)
Location Code
Wage Bill
Input-Output Ratio for Labour
Capital Employed
Input Output Ratio for Capital
Input Output Ratio (Total)
Fixed Assets (Fx. Ass.)
Fixed Assets per Employee (FA/L)
Current Assets
Current Liabilities
Current Ratio (CR)
Borrowing Ratio (Borrow)
Income Gearing (Inc. Gr.)
Export Ratio (XR)

INDUSTRIAL VALVE MANUFACTURERS (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
Clyde Blowers PLC	333	3964	8.401	155	25.574
Cunningham & Shearer	63	5891	1.069	131	44.969
Glenfield & Kennedy	-59	5276	-1.118	280	18.843
Keystone Valve	1412	7475	18.890	114	65.570
T.K. Valve	2059	19384	10.622	296	65.486
Forth Tool & Valve	45	1314	3.425	56	23.464
Crosby Services International	-21	654	-3.211	27	24.222
Henry Valve	412	3862	10.668	93	41.527
Industry Totals	4244	47820	8.875	1152	41.510

INDUSTRIAL VALVE MANUFACTURERS (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Clyde Blowers PLC	70	3556	1.969	-10.293	138	25.768
Cunningham & Shearer	29	5407	0.536	-8.216	123	43.959
Glenfield & Kennedy	-157	6236	-2.518	18.196	322	19.366
Keystone Valve	2770	9447	29.321	26.381	124	76.185
T.K. Valve	-1079	12779	-8.444	-34.074	294	43.466
Forth Tool & Valve	39	1527	2.554	16.210	60	25.450
Crosby Services International	-9	845	-1.065	29.205	29	29.138
Henry Valve	215	3215	6.687	-16.753	78	41.218
Industry Totals	1878	43012	4.366	-10.054	1168	36.825

INDUSTRIAL VALVE MANUFACTURERS (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Clyde Blowers PLC	218	3376	6.457	-5.062	131	25.771
Cunningham & Shearer	97	5589	1.736	3.366	127	44.008
Glenfield & Kennedy	-401	8277	-4.845	32.729	293	28.249
Keystone Valve	2811	11900	23.622	25.966	124	95.968
T.K. Valve	-624	15662	-3.984	22.560	338	46.337
Forth Tool & Valve	102	2411	4.231	57.891	70	34.443
Crosby Services International	56	901	6.215	6.627	31	29.065
Henry Valve	377	3673	10.264	14.246	80	45.913
Industry Totals	2636	51789	5.090	20.406	1194	43.374

INDUSTRIAL VALVE MANUFACTURERS (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Clyde Blowers PLC	GW	1222	0.308	2488	0.628	0.936	1633
Cunningham & Shearer	GW	1069	0.181	1283	0.218	0.399	449
Glenfield & Kennedy	AYR	1900	0.360	2377	0.451	0.811	1331
Keystone Valve	GW	1164	0.156	5984	0.801	0.956	1737
T.K. Valve	FIFE	2694	0.139	13631	0.703	0.842	6414
Forth Tool & Valve	-	-	-	-	-	-	-
Crosby Services International	-	-	-	-	-	-	-
Henry Valve	GW						
Industry Totals		8049	0.229	25763	0.560	0.789	11564

INDUSTRIAL VALVE MANUFACTURERS (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Clyde Blowers PLC	GW	1133	0.319	2376	0.668	0.987	1684
Cunningham & Shearer	GW	1020	0.189	1351	0.250	0.439	501
Glenfield & Kennedy	AYR	2323	0.373	2253	0.361	0.734	1544
Keystone Valve	GW	1343	0.142	5150	0.545	0.687	1544
T.K. Valve	FIFE	2550	0.200	15954	1.248	1.448	7816
Forth Tool & Valve	-	-	-	-	-	-	-
Crosby Services International	-	-	-	-	-	-	-
Henry Valve	GW						
Industry Totals		8369	0.244	27084	0.615	0.859	13089

INDUSTRIAL VALVE MANUFACTURERS (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Clyde Blowers PLC	GW	1129	0.334	2497	0.740	1.074	1685
Cunningham & Shearer	GW	978	0.175	1386	0.248	0.423	482
Glenfield & Kennedy	AYR	2395	0.289	1932	0.233	0.523	1529
Keystone Valve	GW	1729	0.145	5985	0.503	0.648	1480
T.K. Valve	FIFE	3542	0.226	14958	0.955	1.181	7588
Forth Tool & Valve	-	-	-	-	-	-	-
Crosby Services International	-	-	-	-	-	-	-
Henry Valve	GW	496	0.135	643	0.175	0.310	369
Industry Totals		10269	0.218	27401	0.476	0.693	13133

INDUSTRIAL VALVE MANUFACTURERS (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Emp.	Borrow	Inc. Gr.	XR
Clyde Blowers PLC	10.535	1603	748	2.143	0.0	1.5	50.3
Cunningham & Shearer	3.427	2414	1580	1.528	0.4	34.4	15.3
Glenfield & Kennedy	4.754	2358	1312	1.797	0.0	-	-
Keystone Valve	15.237	5030	783	6.424	0.0	-	-
T.K. Valve	21.669	13632	6415	2.125	0.8	15.1	-
Forth Tool & Valve	-	-	-	-	-	-	-
Crosby Services International	-	-	-	-	-	-	-
Henry Valve	-	-	-	-	-	-	-
Industry Totals	11.124	25037	10838	2.803	0.2	17.0	32.8

INDUSTRIAL VALVE MANUFACTURERS (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Sales (%)	Emp.	Inc. Gr.	XR
Clyde Blowers PLC	12.203	1380	688	2.006	0.0	2.8	58.2
Cunningham & Shearer	4.073	2251	1401	1.607	0.4	69.1	12.4
Glenfield & Kennedy	4.795	2634	1925	1.368	0.2	-	55.1
Keystone Valve	12.452	5510	1904	2.894	0.1	-	-
T.K. Valve	26.585	12284	4146	2.963	0.8	-	-
Forth Tool & Valve	-	-	-	-	-	-	-
Crosby Services International	-	-	-	-	-	-	-
Henry Valve	-	-	-	-	-	-	-
Industry Totals	12.022	24059	10064	2.168	0.3	36.0	41.9

INDUSTRIAL VALVE MANUFACTURERS (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Clyde Blowers PLC	12.863	1493	681	2.192	0.0	1.4	52.0
Cunningham & Shearer	3.795	2675	1771	1.510	0.5	42.3	17.9
Glenfield & Kennedy	5.218	3591	3188	1.126	0.7	-	61.0
Keystone Valve	11.935	6981	2476	2.819	0.0	-	-
T.K. Valve	22.450	15309	7939	1.928	1.2	306.6	-
Forth Tool & Valve	-	-	-	-	-	-	-
Crosby Services International	-	-	-	-	-	-	-
Henry Valve	4.613	1511	1237	1.222	-	-	-
Industry Totals	10.146	31560	17292	1.800	0.5	116.8	43.6

INDUSTRIAL VALVE MANUFACTURERS (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Clyde Blowers PLC	241	3334	7.229	-1.244	131	25.450
Cunningham & Shearer	23	5563	0.413	-0.465	114	48.798
Keystone Valve	3337	13264	25.158	11.462	166	79.904
T.K. Valve	2106	21559	9.769	37.652	382	56.437
Forth Tool & Valve	141	2621	5.380	8.710	81	32.358
Crosby Services International	-38	851	-4.465	-5.549	36	23.639
Henry Valve	444	3782	11.740	2.968	83	45.566
Industry Totals	6254	50974	12.269	-1.574	993	51.333

INDUSTRIAL VALVE MANUFACTURERS (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Clyde Blowers PLC	208	3722	5.588	11.638	128	29.078
Cunningham & Shearer	-166	4524	-3.669	-18.677	111	40.757
Keystone Valve	3509	14228	24.663	7.268	173	82.243
T.K. Valve	366	17407	2.103	-19.259	372	46.793
Forth Tool & Valve	156	2673	5.836	1.984	77	34.714
Crosby Services International	116	1285	9.027	50.999	31	41.452
Henry Valve	459	3311	13.863	-12.454	85	38.953
Industry Totals	4648	47150	9.858	-7.502	977	48.260

INDUSTRIAL VALVE MANUFACTURERS (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Clyde Blowers PLC	141	3657	3.856	-1.746	123	29.732
Cunningham & Shearer	-28	5621	-0.498	24.248	107	52.533
Keystone Valve	5133	23373	21.961	64.275	291	80.320
T.K. Valve	-350	11064	-3.163	-36.439	324	34.148
Forth Tool & Valve	253	2848	8.883	6.547	81	35.160
Crosby Services International	-34	1217	-2.794	-5.292	33	36.879
Henry Valve	486	3683	13.196	11.235	83	44.373
Industry Totals	5601	51463	10.884	9.147	1042	49.389

INDUSTRIAL VALVE MANUFACTURERS (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Clyde Blowers PLC	GW	1232	0.370	2578	0.773	1.143	1596
Cunningham & Shearer	GW	1066	0.192	1353	0.243	0.435	500
Keystone Valve	GW	1897	0.143	6852	0.517	0.660	2501
T.K. Valve	FIFE	3951	0.183	15735	0.730	0.913	8659
Forth Tool & Valve	-	-	-	-	-	-	-
Crosby Services International	-	-	-	-	-	-	-
Henry Valve	GW	657	0.174	1009	0.267	0.441	402
Industry Totals		8803	0.212	27527	0.506	0.718	13658

INDUSTRIAL VALVE MANUFACTURERS (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Clyde Blowers PLC	GW	1299	0.349	2620	0.704	1.053	1609
Cunningham & Shearer	GW	1082	0.239	1199	0.265	0.504	487
Keystone Valve	GW	2103	0.148	8255	0.580	0.728	2347
T.K. Valve	FIFE	3482	0.200	14803	0.850	1.050	7350
Forth Tool & Valve	-	-	-	-	-	-	-
Crosby Services International	-	-	-	-	-	-	-
Henry Valve	GW	760	0.230	1145	0.346	0.575	341
Industry Totals		8726	0.233	28022	0.549	0.782	12134

INDUSTRIAL VALVE MANUFACTURERS (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Clyde Blowers PLC	GW	1226	0.335	2631	0.719	0.679	1645
Cunningham & Shearer	GW	1043	0.186	1314	0.234	0.782	484
Keystone Valve	GW	1647	0.070	6445	0.276	0.730	1922
T.K. Valve	FIFE	3244	0.293	15016	1.357	0.730	7565
Forth Tool & Valve	-	-	-	-	-	-	-
Crosby Services International	-	-	-	-	-	-	-
Henry Valve	GW	-	-	-	-	-	-
Industry Totals		7160	0.221	25407	0.647	0.730	11616

INDUSTRIAL VALVE MANUFACTURERS (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Clyde Blowers PLC	12.183	1532	550	2.785	0.0	2.0	56.4
Cunningham & Shearer	4.386	2443	1590	1.536	0.7	78.3	5.6
Keystone Valve	15.066	6276	1925	3.260	0.0	-	-
T.K. Valve	22.668	13268	4609	2.879	0.6	23.6	-
Forth Tool & Valve	-	-	-	-	-	-	-
Crosby Services International	-	-	-	-	-	-	-
Henry Valve	4.843	1699	1092	1.556	-	-	-
Industry Totals	11.829	25218	9766	2.403	0.3	34.6	31.0

INDUSTRIAL VALVE MANUFACTURERS (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Clyde Blowers PLC	12.570	2164	1153	1.877	0.0	2.2	55.9
Cunningham & Shearer	4.387	2675	1963	1.363	0.6	65.6	8.8
Keystone Valve	13.566	9727	3819	2.547	0.0	-	-
T.K. Valve	19.758	10871	3418	3.181	0.4	59.9	-
Forth Tool & Valve	-	-	-	-	-	-	-
Crosby Services International	-	-	-	-	-	-	-
Henry Valve	4.012	1882	1078	1.746	-	-	-
Industry Totals	10.859	27319	11431	2.143	0.3	42.6	32.4

INDUSTRIAL VALVE MANUFACTURERS (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Clyde Blowers PLC	13.374	1768	782	2.261	-	-	-
Cunningham & Shearer	4.521	2492	1661	1.500	-	-	-
Keystone Valve	6.604	6705	2181	3.074	-	-	-
T.K. Valve	23.350	13073	5305	2.464	-	-	-
Forth Tool & Valve	-	-	-	-	-	-	-
Crosby Services International	-	-	-	-	-	-	-
Henry Valve	-	-	-	-	-	-	-
Industry Totals	11.962	24037	9930	2.325	-	-	-

APPENDIX 8 : Knitwear Manufacture

Firm Data (1983-88)

Contents :

Profit
Turnover
Profit-Sales Ratio (PSR %)
Annual Sales Growth (Sales %)
Number of Employees (Emp.)
Average Revenue Product (ARP)
Location Code
Wage Bill
Input-Output Ratio for Labour
Capital Employed
Input Output Ratio for Capital
Input Output Ratio (Total)
Fixed Assets (Fx. Ass.)
Fixed Assets per Employee (FA/L)
Current Assets
Current Liabilities
Current Ratio (CR)
Borrowing Ratio (Borrow)
Income Gearing (Inc. Gr.)
Export Ratio (XR)

KNITWEAR MANUFACTURE (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
Murray Allan	-13	1687	-0.771	85	19.847
The Ballantyne Sportswear Co.	1337	9494	14.083	581	16.341
Barrie Knitwear	533	5102	10.447	354	14.412
Campsie Knitwear	396	5802	6.825	357	16.252
E.W.M. Investments	1614	28764	5.611	832	34.572
The Edinburgh Woollen Mill	1285	27448	4.682	638	43.022
Ferguson Knitwear	-9	287	-3.136	10	28.700
Glenhusky of Scotland	-123	1799	-6.837	92	19.554
Glenmac Knitwear	113	2422	4.666	139	17.424
Harrott & Co.	458	1970	23.249	64	30.781
Hodgson of Scotland	66	1728	3.819	140	12.343
Kyle Knitwear	10	1049	0.953	90	11.656
R. Laidlaw & Sons	11	2361	0.466	185	12.762
Lochcarron J. Buchan	228	2161	10.551	140	15.436
Lovat Enterprises	17	1394	1.220	97	14.371
A. MacDougall & Co.	-279	2320	-12.026	190	12.211
J. & D. McGeorge	757	5120	14.785	360	14.222
Thomas MacKie & Sons	152	2550	5.961	135	18.889
S.H. MacKinnon & Co.	-423	4668	-9.062	584	7.993
Pringle of Scotland	3052	22274	13.702	1263	17.636
James Pringle	100	2251	4.442	107	21.037
Peter Scott & Co.	-66	3275	-2.015	226	14.491
Scottish Worsted & Wollens	-930	9572	-9.716	571	16.764
Thomas Smith & Co.	-12	3684	-0.326	228	16.158
Speyside & Cairngorm Wear	108	2240	4.821	53	42.264
Strathclyde Knitwear	90	1257	7.160	95	13.232
D.C. Dalgliesh	3	169	1.775	19	8.895
The Woolly Mill Co.	-12	1655	-0.725	73	22.671
Bute Fabrics	112	2500	4.480	30	83.333
Industry Totals	8575	157003	5.462	7738	20.290

KNITWEAR MANUFACTURE (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Murray Allan	BDS	415	0.246	404	0.239	0.485	97
The Ballantyne Sportswear Co.	BDS	2572	0.271	2577	0.271	0.542	1524
Barrie Knitwear	BDS	1644	0.322	1855	0.364	0.686	811
Campsie Knitwear	GW	1735	0.299	1503	0.259	0.558	1110
E.W.M. Investments	DMF & GAL	5364	0.186	11559	0.402	0.588	5964
The Edinburgh Woollen Mill	DMF & GAL	2882	0.105	10971	0.400	0.505	5465
Ferguson Knitwear	AYR	-	-	81	0.282	-	20
Glenhusky of Scotland	AYR	400	0.222	560	0.311	0.534	287
Glenmac Knitwear	BDS	613	0.253	1278	0.528	0.781	331
Harrott & Co.	ABD	277	0.141	2270	1.152	1.293	3281
Hodgson of Scotland	FIFE	544	0.315	446	0.258	0.573	260
Kyle Knitwear	AYR	301	0.287	329	0.314	0.601	177
R. Laidlaw & Sons	ABD	837	0.355	654	0.277	0.632	529
Lochcarron J. Buchan	BDS	537	0.248	1701	0.787	1.036	601
Lovat Enterprises	AYR	322	0.231	299	0.214	0.445	179
A. MacDougall & Co.	LNK	774	0.334	202	0.087	0.421	624
J. & D. McGeorge	DMF & GAL	1561	0.305	2327	0.454	0.759	672
Thomas MacKie & Sons	AYR	613	0.240	1149	0.451	0.691	320
S.H. MacKinnon & Co.	LNK	2165	0.464	558	0.120	0.583	662
Pringle of Scotland	BDS	6530	0.293	6694	0.301	0.594	2477
James Pringle	HLAND	406	0.180	1061	0.471	0.652	1007
Peter Scott & Co.	BDS	1157	0.353	2027	0.619	0.972	215
Scottish Worsted & Wollens	BDS	2525	0.264	929	0.097	0.361	1896
Thomas Smith & Co.	ABD	873	0.237	2007	0.545	0.782	1159
Speyside & Cairngorm Wear	FIFE	443	0.198	849	0.379	0.577	609
Strathclyde Knitwear	AYR	376	0.299	170	0.135	0.434	178
D.C. Dalgliesh	BDS	-	-	-	-	-	-
The Woolly Mill Co.	DMF & GAL	-	-	-	-	-	-
Bute Fabrics	AGY & BT	-	-	-	-	-	-
Industry Totals		35866	0.266	54460	0.374	0.643	30455

KNITWEAR MANUFACTURE (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Murray Allan	1.141	693	386	1.795	0.6	168.4	-
The Ballantyne Sportswear Co.	2.623	3534	2481	1.424	0.5	-	69.0
Barrie Knitwear	2.291	2495	1451	1.720	0.5	-	80.4
Campsie Knitwear	3.109	1573	1255	1.253	0.1	21.9	30.0
E.W.M. Investments	7.168	10998	5403	2.036	0.0	0.3	3.0
The Edinburgh Woollen Mill	8.566	9704	4198	2.312	1.8	-	0.4
Ferguson Knitwear	2.000	162	100	1.620	-	-	-
Glenhusky of Scotland	3.120	859	586	1.466	0.8	-	-
Glenmac Knitwear	2.381	1405	458	3.068	0.2	-	82.7
Harrott & Co.	51.266	1395	2406	0.580	1.1	-	-
Hodgson of Scotland	1.857	757	571	1.326	0.8	21.4	2.4
Kyle Knitwear	1.967	302	150	2.013	0.2	47.4	-
R. Laidlaw & Sons	2.859	1177	992	1.186	1.2	87.5	70.8
Lochcarron J. Buchan	4.293	1657	557	2.975	0.2	13.6	43.0
Lovat Enterprises	1.845	401	281	1.427	0.7	37.0	-
A. MacDougall & Co.	3.284	2323	2745	0.846	22.7	-	52.1
J. & D. McGeorge	1.867	3135	1480	2.118	0.3	21.1	88.0
Thomas MacKie & Sons	2.370	1333	504	2.645	0.0	0.0	-
S.H. MacKinnon & Co.	1.134	4375	4479	0.977	18.7	-	8.7
Pringle of Scotland	1.961	9278	5061	1.833	0.3	0.1	48.7
James Pringle	9.411	935	881	1.061	0.6	-	32.0
Peter Scott & Co.	0.951	2079	267	7.787	0.0	-	82.1
Scottish Worsted & Wollens	3.320	4932	5899	0.836	309.6	-	45.7
Thomas Smith & Co.	5.083	1790	942	1.900	0.4	115.0	38.4
Speyside & Cairngorm Wear	11.491	718	478	1.502	0.4	24.5	10.8
Strathclyde Knitwear	1.874	751	759	0.989	-	4.3	-
D.C. Dalgliesh	-	-	-	-	-	-	-
The Woolly Mill Co.	-	-	-	-	-	-	-
Bute Fabrics	-	-	-	-	-	-	-
Industry Totals	5.355	62039	40452	1.873	15.1	40.2	43.8

KNITWEAR MANUFACTURE (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Murray Allan	-8	1893	-0.423	12.211	92	20.576
The Ballantyne Sportswear Co.	1216	10539	11.538	11.007	561	18.786
Barrie Knitwear	635	5868	10.821	15.014	371	15.817
Campsie Knitwear	396	9254	4.279	59.497	598	15.475
E.W.M. Investments	1828	34282	5.332	19.184	952	36.011
The Edinburgh Woollen Mill	1219	30991	3.933	12.908	698	44.400
Ferguson Knitwear	19	350	5.429	21.951	10	35.000
Glenhusky of Scotland	4	2100	0.190	16.732	99	21.212
Glenmac Knitwear	158	2593	6.093	7.060	137	18.927
Harrott & Co.	603	2059	29.286	4.518	67	30.731
Hodgson of Scotland	126	2312	5.450	33.796	173	13.364
Kyle Knitwear	42	1292	3.251	23.165	90	14.356
R. Laidlaw & Sons	54	2826	1.911	19.695	196	14.418
Lochcarron J. Buchan	366	2811	13.020	30.079	140	20.079
Lovat Enterprises	45	1646	2.734	18.077	97	16.969
A. MacDougall & Co.	-269	1837	-14.643	-20.819	129	14.240
J. & D. McGeorge	1205	6623	18.194	29.355	366	18.096
Thomas MacKie & Sons	167	2924	5.711	14.667	135	21.659
S.H. MacKinnon & Co.	-57	8229	-0.693	76.285	740	11.120
Pringle of Scotland	3046	25497	11.947	14.470	1254	20.333
James Pringle	371	4028	9.211	78.943	119	33.849
Peter Scott & Co.	128	4004	3.197	22.260	231	17.333
Scottish Worsted & Wollens	187	8987	2.081	-6.112	415	21.655
Thomas Smith & Co.	103	4200	2.452	14.007	232	18.103
Speyside & Cairngorm Wear	170	2733	6.220	22.009	60	45.550
Strathclyde Knitwear	244	1546	15.783	22.991	97	15.938
D.C. Dalgliesh	3	175	1.714	3.550	19	9.211
The Woolly Mill Co.	18	1997	0.901	20.665	75	26.627
Bute Fabrics	147	2687	5.471	7.480	32	83.969
Industry Totals	12166	186283	6.531	18.649	8185	22.759

KNITWEAR MANUFACTURE (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Murray Allan	BDS	512	0.270	393	0.208	0.478	123
The Ballantyne Sportswear Co.	BDS	2829	0.268	3646	0.346	0.614	1602
Barrie Knitwear	BDS	1935	0.330	2610	0.445	0.775	880
Campsie Knitwear	GW	2798	0.302	2299	0.248	0.551	1913
E.W.M. Investments	DMF & GAL	6521	0.190	12848	0.375	0.565	6222
The Edinburgh Woollen Mill	DMF & GAL	3439	0.111	11842	0.382	0.493	5759
Ferguson Knitwear	AYR	-	-	96	0.274	-	32
Glenhusky of Scotland	AYR	424	0.202	564	0.269	0.470	280
Glenmac Knitwear	BDS	690	0.266	1365	0.526	0.793	318
Harrott & Co.	ABD	330	0.160	1825	0.886	1.047	3332
Hodgson of Scotland	FIFE	724	0.313	695	0.301	0.614	481
Kyle Knitwear	AYR	363	0.281	363	0.281	0.562	220
R. Laidlaw & Sons	ABD	966	0.342	1155	0.409	0.751	922
Lochcarron J. Buchan	BDS	600	0.213	1925	0.685	0.898	734
Lovat Enterprises	AYR	395	0.240	336	0.204	0.444	225
A. MacDougall & Co.	LNK	584	0.318	-1093	-0.595	-0.277	608
J. & D. McGeorge	DMF & GAL	1809	0.273	2985	0.451	0.724	702
Thomas MacKie & Sons	AYR	737	0.252	1281	0.438	0.690	319
S.H. MacKinnon & Co.	LNK	2782	0.338	924	0.112	0.450	860
Pringle of Scotland	BDS	6902	0.271	7366	0.289	0.560	2709
James Pringle	HLAND	558	0.139	1061	0.263	0.402	1430
Peter Scott & Co.	BDS	1208	0.302	2099	0.524	0.826	255
Scottish Worsted & Wollens	BDS	1992	0.222	1240	0.138	0.360	1505
Thomas Smith & Co.	ABD	1063	0.253	2103	0.501	0.754	1231
Speyside & Cairngorm Wear	FIFE	503	0.184	1013	0.371	0.555	619
Strathclyde Knitwear	AYR	426	0.276	364	0.235	0.511	152
D.C. Dalgliesh	BDS	-	-	-	-	-	-
The Woolly Mill Co.	DMF & GAL	-	-	-	-	-	-
Bute Fabrics	AGY & BT	300	0.112	1453	0.541	0.652	292
Industry Totals		41390	0.247	62758	0.337	0.587	33725

KNITWEAR MANUFACTURE (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Murray Allan	1.337	913	643	1.420	1.5	122.9	-
The Ballantyne Sportswear Co.	2.856	4158	2114	1.967	0.4	-	61.2
Barrie Knitwear	2.372	2746	1016	2.703	0.3	-	67.0
Campsie Knitwear	3.199	2416	2030	1.190	0.4	17.3	43.4
E.W.M. Investments	6.536	11625	4999	2.325	0.0	0.8	4.6
The Edinburgh Woollen Mill	8.251	10131	4048	2.503	1.6	-	0.4
Ferguson Knitwear	3.200	194	162	1.198	-	-	-
Glenhusky of Scotland	2.828	677	393	1.723	0.5	88.2	-
Glenmac Knitwear	2.321	1671	624	2.678	0.3	-	75.9
Harrott & Co.	49.731	1497	3004	0.498	1.0	0.2	-
Hodgson of Scotland	2.780	922	709	1.300	0.8	13.7	1.1
Kyle Knitwear	2.444	410	267	1.536	0.4	17.6	6.5
R. Laidlaw & Sons	4.704	1514	1281	1.182	0.8	60.6	49.5
Lochcarron J. Buchan	5.243	2087	896	2.329	0.3	7.6	47.2
Lovat Enterprises	2.320	506	395	1.281	0.7	19.6	-
A. MacDougall & Co.	4.713	1254	2955	0.424	-	-	40.1
J. & D. McGeorge	1.918	3851	1568	2.456	0.1	11.3	84.4
Thomas MacKie & Sons	2.363	1586	624	2.542	0.0	0.6	-
S.H. MacKinnon & Co.	1.162	2674	2610	1.025	13.5	126.9	22.4
Pringle of Scotland	2.160	11533	6876	1.677	0.5	0.3	39.5
James Pringle	12.017	1199	1065	1.126	0.5	23.2	41.7
Peter Scott & Co.	1.104	2628	784	3.352	0.2	15.8	81.1
Scottish Worsted & Wollens	3.627	5399	5664	0.953	14.7	56.2	42.1
Thomas Smith & Co.	5.306	2400	1528	1.571	0.7	41.5	39.4
Speyside & Cairngorm Wear	10.317	817	423	1.931	0.3	15.8	9.8
Strathclyde Knitwear	1.567	732	520	1.408	11.0	0.0	-
D.C. Dalgliesh	-	-	-	-	-	-	-
The Woolly Mill Co.	-	-	-	-	-	-	-
Bute Fabrics	9.125	1883	722	2.608	0.1	0.2	-
Industry Totals	5.759	76510	47277	1.737	2.0	30.5	39.9

KNITWEAR MANUFACTURE (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Murray Allan	167	3348	4.988	76.862	106	31.585
The Ballantyne Sportswear Co.	1619	13412	12.071	27.261	596	22.503
Barrie Knitwear	851	6487	13.119	10.549	364	17.821
Campsie Knitwear	135	9737	1.386	5.219	619	15.730
E.W.M. Investments	2829	39787	7.110	16.058	1020	39.007
The Edinburgh Woollen Mill	2052	34786	5.899	12.245	768	45.294
Ferguson Knitwear	-30	324	-9.259	-7.429	10	32.400
Glenhusky of Scotland	121	1792	6.752	-14.667	93	19.269
Glenmac Knitwear	248	3633	6.826	40.108	158	22.994
Harrott & Co.	601	2409	24.948	16.999	76	31.697
Hodgson of Scotland	279	3060	9.118	32.353	203	15.074
Kyle Knitwear	44	1423	3.092	10.139	91	15.637
R. Laidlaw & Sons	-45	4471	-1.006	58.209	282	15.855
Lochcarron J. Buchan	422	3530	11.955	25.578	140	25.214
Lovat Enterprises	50	1837	2.722	11.604	100	18.370
A. MacDougall & Co.	-141	2113	-6.673	15.024	112	18.866
J. & D. McGeorge	1102	9088	12.126	37.219	419	21.690
Thomas MacKie & Sons	166	3246	5.114	11.012	135	24.044
S.H. MacKinnon & Co.	-234	9033	-2.591	9.770	760	11.886
Pringle of Scotland	3296	29517	11.166	15.767	1339	22.044
James Pringle	235.5	4028	5.847	0.000	119	33.849
Peter Scott & Co.	353	5084	6.943	26.973	255	19.937
Scottish Worsted & Wollens	1376	10249	13.426	14.043	428	23.946
Thomas Smith & Co.	318	4500	7.067	7.143	245	18.367
Speyside & Cairngorm Wear	36	3439	1.047	25.832	71	48.437
Strathclyde Knitwear	168	1774	9.470	14.748	101	17.564
D.C. Dalgliesh	4	169	2.367	-3.429	20	8.450
The Woolly Mill Co.	70	1880	3.723	-5.859	70	26.857
Bute Fabrics	251	3841	6.535	42.948	39	98.487
Industry Totals	16343.5	217997	7.497	17.025	8739	24.945

KNITWEAR MANUFACTURE (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Murray Allan	BDS	703	0.210	723	0.216	0.426	320
The Ballantyne Sportswear Co.	BDS	3210	0.239	4522	0.337	0.576	2087
Barrie Knitwear	BDS	2188	0.337	3179	0.490	0.827	1413
Campsie Knitwear	GW	3347	0.344	2837	0.291	0.635	2364
E.W.M. Investments	DMF & GAL	7114	0.179	14848	0.373	0.552	6973
The Edinburgh Woollen Mill	DMF & GAL	3821	0.110	13390	0.385	0.495	6543
Ferguson Knitwear	AYR	133	0.410	52	0.160	0.571	17
Glenhusky of Scotland	AYR	386	0.215	540	0.301	0.517	272
Glenmac Knitwear	BDS	880	0.242	1125	0.310	0.552	242
Harrott & Co.	ABD	376	0.156	1891	0.785	0.941	3307
Hodgson of Scotland	FIFE	927	0.303	972	0.318	0.621	673
Kyle Knitwear	AYR	386	0.271	427	0.300	0.571	299
R. Laidlaw & Sons	ABD	1457	0.326	1114	0.249	0.575	1050
Lochcarron J. Buchan	BDS	793	0.225	2183	0.618	0.843	965
Lovat Enterprises	AYR	436	0.237	396	0.216	0.453	301
A. MacDougall & Co.	LNK	639	0.302	331	0.157	0.459	561
J. & D. McGeorge	DMF & GAL	2200	0.242	3273	0.360	0.602	1037
Thomas MacKie & Sons	AYR	785	0.242	1366	0.421	0.663	328
S.H. MacKinnon & Co.	LNK	3228	0.357	958	0.106	0.463	1335
Pringle of Scotland	BDS	7998	0.271	10114	0.343	0.614	4943
James Pringle	HLAND	667	0.166	1891	0.469	0.635	1518
Peter Scott & Co.	BDS	1443	0.284	2274	0.447	0.731	307
Scottish Worsted & Wollens	BDS	2147	0.209	2335	0.228	0.437	1229
Thomas Smith & Co.	ABD	1152	0.256	2474	0.550	0.806	1197
Speyside & Cairngorm Wear	FIFE	727	0.211	1238	0.360	0.571	835
Strathclyde Knitwear	AYR	495	0.279	462	0.260	0.539	132
D.C. Dalgliesh	BDS	78	0.462	60	0.355	0.817	25
The Woolly Mill Co.	DMF & GAL	486	0.259	472	0.251	0.510	223
Bute Fabrics	AGY & BT	342	0.089	1730	0.450	0.539	428
Industry Totals		48544	0.256	77177	0.349	0.605	40924

KNITWEAR MANUFACTURE (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Murray Allan	3.019	1392	989	1.407	1.8	40.4	-
The Ballantyne Sportswear Co.	3.502	5285	2850	1.854	0.3	-	60.7
Barrie Knitwear	3.882	3507	1741	2.014	0.3	-	69.1
Campsie Knitwear	3.819	2464	1991	1.238	0.6	68.2	38.5
E.W.M. Investments	6.836	13883	6008	2.311	0.0	0.4	5.7
The Edinburgh Woollen Mill	8.520	12213	5366	2.276	1.4	-	0.5
Ferguson Knitwear	1.700	130	113	1.150	-	-	-
Glenhusky of Scotland	2.925	638	370	1.724	0.2	8.3	-
Glenmac Knitwear	1.532	2126	1243	1.710	0.4	0.0	75.9
Harrott & Co.	43.513	1308	2724	0.480	1.1	9.4	-
Hodgson of Scotland	3.315	1131	834	1.356	0.6	12.8	1.1
Kyle Knitwear	3.286	445	317	1.404	0.5	21.4	13.6
R. Laidlaw & Sons	3.723	2029	1965	1.033	1.2	131.7	67.9
Lochcarron J. Buchan	6.893	2603	1385	1.879	0.4	12.3	47.6
Lovat Enterprises	3.010	592	497	1.191	1.1	21.9	-
A. MacDougall & Co.	5.009	1105	1335	0.828	-	-	32.3
J. & D. McGeorge	2.475	5203	2967	1.754	0.3	17.6	82.8
Thomas MacKie & Sons	2.430	1850	812	2.278	0.0	-	-
S.H. MacKinnon & Co.	1.757	3637	4014	0.906	21.9	400.0	30.0
Pringle of Scotland	3.692	13071	7900	1.655	0.5	0.2	43.4
James Pringle	12.756	1555	1182	1.316	0.4	18.6	46.2
Peter Scott & Co.	1.204	3166	1199	2.641	0.3	16.2	76.9
Scottish Worsted & Wollens	2.871	5801	4695	1.236	1.9	11.1	31.7
Thomas Smith & Co.	4.886	2710	1434	1.890	0.5	23.8	50.1
Speyside & Cairngorm Wear	11.761	1534	1131	1.356	0.7	58.6	13.3
Strathclyde Knitwear	1.307	861	531	1.621	4.3	1.8	-
D.C. Dalgliesh	1.250	105	70	1.500	-	-	-
The Woolly Mill Co.	3.186	755	506	1.492	-	-	-
Bute Fabrics	10.974	1732	430	4.028	0.1	0.3	68.1
Industry Totals	5.691	91439	55610	1.639	1.6	41.7	42.8

KNITWEAR MANUFACTURE (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Murray Allan	158	3331	4.743	-0.508	107	31.131
The Ballantyne Sportswear Co.	1779	16439	10.822	22.569	624	26.345
Barrie Knitwear	941	7071	13.308	9.003	387	18.271
Campsie Knitwear	129	10047	1.284	3.184	592	16.971
E.W.M. Investments	3005	53157	5.653	33.604	1090	48.768
The Edinburgh Woollen Mill	2453	46510	5.274	33.703	781	59.552
Ferguson Knitwear	-23	171	-13.450	-47.222	6	28.500
Glenhusky of Scotland	150	1771	8.470	-1.172	101	17.535
Glenmac Knitwear	339	4587	7.390	26.259	185	24.795
Harrott & Co.	586	2314	25.324	-3.944	70	33.057
Hodgson of Scotland	320	4280	7.477	39.869	245	17.469
Kyle Knitwear	143	1708	8.372	20.028	101	16.911
R. Laidlaw & Sons	-647	3932	-16.455	-12.055	195	20.164
Lochcarron J. Buchan	332	3447	9.632	-2.351	180	19.150
Lovat Enterprises	168	2303	7.295	25.367	107	21.523
A. MacDougall & Co.	-108	1445	-7.474	-31.614	78	18.526
J. & D. McGeorge	1731	10073	17.185	10.838	465	21.662
Thomas MacKie & Sons	181	3316	5.458	2.157	139	23.856
S.H. MacKinnon & Co.	-335	6012	-5.572	-33.444	350	17.177
Pringle of Scotland	3451	33674	10.248	14.083	1480	22.753
James Pringle	306	5207	5.877	29.270	150	34.713
Peter Scott & Co.	97	4814	2.015	-5.311	258	18.659
Scottish Worsted & Wollens	1723	13216	13.037	28.949	463	28.544
Thomas Smith & Co.	478	8324	5.742	84.978	237	35.122
Speyside & Cairngorm Wear	-210	2879	-7.294	-16.284	72	39.986
Strathclyde Knitwear	139	1781	7.805	0.395	105	16.962
D.C. Dalgliesh	-1	197	-0.508	16.568	18	10.944
The Woolly Mill Co.	10	1844	0.542	-1.915	70	26.343
Bute Fabrics	456	4110	11.095	7.003	49	83.878
Industry Totals	17751	257960	6.881	18.332	8705	29.634

KNITWEAR MANUFACTURE (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Murray Allan	BDS	-	-	-	-	-	-
The Ballantyne Sportswear Co.	BDS	3643	0.222	4489	0.273	0.495	2172
Barrie Knitwear	BDS	2445	0.346	3321	0.470	0.815	1425
Campsie Knitwear	GW	3325	0.331	3077	0.306	0.637	2506
E.W.M. Investments	DMF & GAL	6970	0.131	13580	0.255	0.387	8178
The Edinburgh Woollen Mill	DMF & GAL	4270	0.092	11918	0.256	0.348	7598
Ferguson Knitwear	AYR	134	0.784	50	0.292	1.076	17
Glenhusky of Scotland	AYR	493	0.279	835	0.471	0.750	269
Glenmac Knitwear	BDS	1076	0.235	1334	0.291	0.525	316
Harrott & Co.	ABD	348	0.150	1775	0.767	0.917	3339
Hodgson of Scotland	FIFE	1274	0.298	1410	0.329	0.627	1106
Kyle Knitwear	AYR	266	0.156	879	0.515	0.670	375
R. Laidlaw & Sons	ABD	1189	0.302	791	0.201	0.504	982
Lochcarron J. Buchan	BDS	839	0.243	2473	0.717	0.961	1129
Lovat Enterprises	AYR	520	0.226	660	0.287	0.512	348
A. MacDougall & Co.	LNK	-	-	-	-	-	-
J. & D. McGeorge	DMF & GAL	2632	0.261	3617	0.359	0.620	1304
Thomas MacKie & Sons	AYR	794	0.239	1628	0.491	0.730	350
S.H. MacKinnon & Co.	LNK	-	-	-	-	-	-
Pringle of Scotland	BDS	9492	0.282	9801	0.291	0.573	5772
James Pringle	HLAND	810	0.156	2020	0.388	0.543	1691
Peter Scott & Co.	BDS	1514	0.314	2303	0.478	0.793	382
Scottish Worsted & Wollens	BDS	2703	0.205	3715	0.281	0.486	1791
Thomas Smith & Co.	ABD	1274	0.153	2781	0.334	0.487	1312
Speyside & Cairngorm Wear	FIFE	709	0.246	1034	0.359	0.605	793
Strathclyde Knitwear	AYR	570	0.320	496	0.278	0.599	139
D.C. Dalgliesh	BDS	85	0.431	59	0.299	0.731	24
The Woolly Mill Co.	DMF & GAL	453	0.246	398	0.216	0.461	230
Bute Fabrics	AGY & BT	403	0.098	2434	0.592	0.690	578
Industry Totals		48231	0.259	76878	0.377	0.636	44126

KNITWEAR MANUFACTURE (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Murray Allan	-	-	-	-	-	-	-
The Ballantyne Sportswear Co.	3.481	5252	2935	1.789	0.4	-	56.9
Barrie Knitwear	3.682	3886	1990	1.953	0.5	-	74.3
Campsie Knitwear	4.233	1888	1317	1.434	0.5	64.9	29.9
E.W.M. Investments	7.503	14202	8800	1.614	-	-	-
The Edinburgh Woollen Mill	9.729	12198	7878	1.548	-	-	-
Ferguson Knitwear	2.833	124	91	1.363	-	-	-
Glenhusky of Scotland	2.663	920	354	2.599	0.3	-	-
Glenmac Knitwear	1.708	1958	940	2.083	0.3	-	73.8
Harrott & Co.	47.700	1017	2581	0.394	1.1	8.5	-
Hodgson of Scotland	4.514	1472	1169	1.259	0.8	18.6	1.5
Kyle Knitwear	3.713	611	317	1.927	0.4	26.1	15.7
R. Laidlaw & Sons	5.036	1504	1695	0.887	1.0	118.4	72.4
Lochcarron J. Buchan	6.272	2840	1496	1.898	0.4	14.9	44.9
Lovat Enterprises	3.252	854	542	1.576	0.9	22.2	-
A. MacDougall & Co.	-	-	-	-	-	-	-
J. & D. McGeorge	2.804	4248	1935	2.195	0.2	-	76.0
Thomas MacKie & Sons	2.518	2109	831	2.538	0.0	-	-
S.H. MacKinnon & Co.	-	-	-	-	-	-	-
Pringle of Scotland	3.900	14455	10426	1.386	0.6	0.5	40.4
James Pringle	11.273	2169	1840	1.179	0.6	28.8	35.9
Peter Scott & Co.	1.481	2537	616	4.119	0.1	48.7	81.3
Scottish Worsted & Wollens	3.868	7724	5800	1.332	1.5	3.4	36.3
Thomas Smith & Co.	5.536	2683	1214	2.210	0.3	13.6	47.9
Speyside & Cairngorm Wear	11.014	1477	1236	1.195	0.5	47.7	12.7
Strathclyde Knitwear	1.324	920	563	1.634	-	2.7	-
D.C. Dalgliesh	1.333	111	76	1.461	-	-	-
The Woolly Mill Co.	3.286	763	595	1.282	-	-	-
Bute Fabrics	11.796	2594	738	3.515	0.2	0.0	73.7
Industry Totals	6.402	90516	57975	1.783	0.5	27.9	48.4

KNITWEAR MANUFACTURE (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Murray Allan	189	3899	4.847	17.052	115	33.904
The Ballantyne Sportswear Co.	1948	14433	13.497	-12.203	592	24.380
Barrie Knitwear	1033	9503	10.870	34.394	384	24.747
Campsie Knitwear	-221	7918	-2.791	-21.190	488	16.225
E.W.M. Investments	3068	53151	5.772	-0.011	1110	47.884
The Edinburgh Woollen Mill	2453	46715	5.251	0.441	808	57.816
Glenhusky of Scotland	139	2412	5.763	36.194	102	23.647
Glenmac Knitwear	424	5095	8.322	11.075	182	27.995
Harrott & Co.	592	2411	24.554	4.192	68	35.456
Hodgson of Scotland	294	4689	6.270	9.556	278	16.867
Kyle Knitwear	124	1669	7.430	-2.283	112	14.902
R. Laidlaw & Sons	84	2542	3.304	-35.351	184	13.815
Lochcarron J. Buchan	471	3962	11.888	14.941	168	23.583
Lovat Enterprises	22	527	4.175	-77.117	6	87.833
J. & D. McGeorge	812	9855	8.239	-2.164	471	20.924
Thomas MacKie & Sons	318	3404	9.342	2.654	144	23.639
Pringle of Scotland	2440	34611	7.050	2.783	1632	21.208
James Pringle	564	7259	7.770	39.408	188	38.612
Peter Scott & Co.	159	6006	2.647	24.761	271	22.162
Scottish Worsted & Wollens	1544	10677	14.461	-19.212	459	23.261
Thomas Smith & Co.	305	6209	4.912	-25.408	240	25.871
Speyside & Cairngorm Wear	-6	2859	-0.210	-0.695	67	42.672
Strathclyde Knitwear	83	1762	4.711	-1.067	96	18.354
D.C. Dalgliesh	2	201	0.995	2.030	17	11.824
The Woolly Mill Co.	34	2132	1.595	15.618	71	30.028
Bute Fabrics	478	4095	11.673	-0.365	56	73.125
Clan Douglas Knitwear	-79	1354	-5.835	-	52	26.038
J. Templeton & Sons	-13	102	-12.745	-	7	14.571
MacNaughton Holdings	95	1111	8.551	-	32	34.719
Industry Totals	17356	250563	6.927	-2.867	8400	29.829

KNITWEAR MANUFACTURE (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Murray Allan	BDS	-	-	-	-	-	-
The Ballantyne Sportswear Co.	BDS	3872	0.268	4562	0.316	0.584	2254
Barrie Knitwear	BDS	2621	0.276	2986	0.314	0.590	1625
Campsie Knitwear	GW	2807	0.355	2454	0.310	0.664	2322
E.W.M. Investments	DMF & GAL	8202	0.154	19102	0.359	0.514	10672
The Edinburgh Woollen Mill	DMF & GAL	5222	0.112	15929	0.341	0.453	9836
Glenhusky of Scotland	AYR	520	0.216	1104	0.458	0.673	291
Glenmac Knitwear	BDS	1193	0.234	1202	0.236	0.470	400
Harrott & Co.	ABD	390	0.162	2050	0.850	1.012	3412
Hodgson of Scotland	FIFE	1212	0.258	1532	0.327	0.585	1099
Kyle Knitwear	AYR	549	0.329	939	0.563	0.892	440
R. Laidlaw & Sons	ABD	1242	0.489	1361	0.535	1.024	1116
Lochcarron J. Buchan	BDS	917	0.231	2732	0.690	0.921	1202
Lovat Enterprises	AYR	60	0.113	77	0.146	0.259	56
J. & D. McGeorge	DMF & GAL	2762	0.280	2623	0.266	0.546	3442
Thomas MacKie & Sons	AYR	833	0.245	1861	0.547	0.791	367
Pringle of Scotland	BDS	10663	0.308	10822	0.313	0.621	8217
James Pringle	HLAND	1025	0.141	2915	0.402	0.543	1942
Peter Scott & Co.	BDS	1756	0.292	2355	0.392	0.684	364
Scottish Worsted & Wollens	BDS	2991	0.280	2649	0.248	0.528	1875
Thomas Smith & Co.	ABD	1403	0.226	2905	0.468	0.694	1288
Speyside & Cairngorm Wear	FIFE	705	0.247	1193	0.417	0.664	818
Strathclyde Knitwear	AYR	536	0.304	513	0.291	0.595	127
D.C. Dalgliesh	BDS	87	0.433	61	0.303	0.736	24
The Woolly Mill Co.	DMF & GAL	528	0.248	453	0.212	0.460	266
Bute Fabrics	AGY & BT	441	0.108	2857	0.698	0.805	603
Clan Douglas Knitwear	BDS	316	0.233	128	0.095	0.328	131
J. Templeton & Sons	AYR	35	0.343	-42	-0.412	-0.069	16
MacNaughton Holdings	PTH & KIN	-	-	925	0.833	-	-
Industry Totals		52888	0.255	88248	0.376	0.614	54205

KNITWEAR MANUFACTURE (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Murray Allan	-	-	-	-	-	-	-
The Ballantyne Sportswear Co.	3.807	5333	3025	1.763	0.5	-	69.2
Barrie Knitwear	4.232	3217	1856	1.733	0.3	-	81.9
Campsie Knitwear	4.758	2024	1892	1.070	0.4	57.8	36.4
E.W.M. Investments	9.614	17315	8885	1.949	0.3	5.9	5.0
The Edinburgh Woollen Mill	12.173	13756	7663	1.795	2.6	-	0.4
Glenhusky of Scotland	2.853	1151	338	3.405	0.2	-	-
Glenmac Knitwear	2.198	1895	1093	1.734	0.2	-	79.5
Harrott & Co.	50.176	1353	2715	0.498	0.9	7.9	-
Hodgson of Scotland	3.953	1545	1112	1.389	0.8	21.5	1.8
Kyle Knitwear	3.929	940	441	2.132	0.4	24.8	-
R. Laidlaw & Sons	6.065	1600	1577	1.015	0.9	-	-
Lochcarron J. Buchan	7.155	2811	1281	2.194	0.4	13.3	-
Lovat Enterprises	9.333	241	220	1.095	1.0	18.8	-
J. & D. McGeorge	7.308	4376	5195	0.842	1.4	-	85.7
Thomas MacKie & Sons	2.549	2542	1048	2.426	0.0	-	-
Pringle of Scotland	5.035	12168	9563	1.272	0.7	0.7	42.4
James Pringle	10.330	3430	2457	1.396	0.7	27.7	40.6
Peter Scott & Co.	1.343	3567	1576	2.263	0.1	-	76.4
Scottish Worsted & Wollens	4.085	8357	7583	1.102	3.5	5.3	40.2
Thomas Smith & Co.	5.367	2850	1233	2.311	0.5	18.1	51.1
Speyside & Cairngorm Wear	12.209	1578	1203	1.312	-	-	-
Strathclyde Knitwear	1.323	779	393	1.982	-	-	-
D.C. Dalgliesh	1.412	106	69	1.536	-	-	-
The Woolly Mill Co.	3.746	967	780	1.240	-	-	-
Bute Fabrics	10.768	3240	986	3.286	0.2	0.0	-
Clan Douglas Knitwear	2.519	746	749	0.996	-	-	-
J. Templeton & Sons	2.286	69	127	0.543	-	-	-
MacNaughton Holdings	-	-	107	-	-	-	-
Industry Totals	7.057	97956	65167	1.640	0.8	16.8	47.0

KNITWEAR MANUFACTURE (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Murray Allan	221	4856	4.551	24.545	119	40.807
The Ballantyne Sportswear Co.	2578	17619	14.632	22.074	633	27.834
Barrie Knitwear	1425	9936	14.342	4.556	384	25.875
Campsie Knitwear	115	6976	1.649	-11.897	330	21.139
E.W.M. Investments	3045	46092	6.606	-13.281	1402	32.876
The Edinburgh Woollen Mill	3052	41049	7.435	-12.129	954	43.028
Glenhusky of Scotland	7	2091	0.335	-13.308	96	21.781
Glenmac Knitwear	480	5369	8.940	5.378	222	24.185
Harrott & Co.	677	2638	25.663	9.415	67	39.373
Hodgson of Scotland	460	5760	7.986	22.841	296	19.459
Kyle Knitwear	128	1895	6.755	13.541	113	16.770
R. Laidlaw & Sons	-36	3419	-1.053	34.500	171	19.994
Lochcarron J. Buchan	549	5291	10.376	33.544	186	28.446
Lovat Enterprises	38	539	7.050	2.277	5	107.800
J. & D. McGeorge	-423	8304	-5.094	-15.738	459	18.092
Thomas MacKie & Sons	286	3708	7.713	8.931	144	25.750
Pringle of Scotland	2493	34569	7.212	-0.121	1624	21.286
James Pringle	374	7307	5.118	0.661	202	36.173
Peter Scott & Co.	332	6528	5.086	8.691	295	22.129
Scottish Worsted & Wollens	1823	11233	16.229	5.207	455	24.688
Thomas Smith & Co.	358	6743	5.309	8.600	239	28.213
Speyside & Cairngorm Wear	-192	2791	-6.879	-2.378	64	43.609
Strathclyde Knitwear	337	2272	14.833	28.944	97	23.423
D.C. Dalgliesh	1	215	0.465	6.965	17	12.647
The Woolly Mill Co.	-75	1899	-3.949	-10.929	70	27.129
Bute Fabrics	530	5263	10.070	28.523	58	90.741
Clan Douglas Knitwear	-11	2460	-0.447	81.684	67	36.716
J. Templeton & Sons	-7	61	-11.475	-40.196	6	10.167
MacNaughton Holdings	148	1339	11.053	20.522	40	33.475
Industry Totals	18713	248222	7.539	-0.934	8815	28.159

KNITWEAR MANUFACTURE (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Murray Allan	BDS	-	-	-	-	-	-
The Ballantyne Sportswear Co.	BDS	3225	0.183	3959	0.225	0.408	1928
Barrie Knitwear	BDS	2167	0.218	2790	0.281	0.499	1231
Campsie Knitwear	GW	2802	0.402	2434	0.349	0.751	2043
E.W.M. Investments	DMF & GAL	6834	0.148	14387	0.312	0.460	7602
The Edinburgh Woollen Mill	DMF & GAL	3927	0.096	12810	0.312	0.408	7040
Glenhusky of Scotland	AYR	445	0.213	721	0.345	0.557	280
Glenmac Knitwear	BDS	1525	0.284	1025	0.191	0.475	445
Harrott & Co.	ABD	411	0.156	3716	1.409	1.565	3511
Hodgson of Scotland	FIFE	936	0.163	1011	0.176	0.338	724
Kyle Knitwear	AYR	373	0.197	587	0.310	0.507	302
R. Laidlaw & Sons	ABD	1138	0.333	1015	0.297	0.630	920
Lochcarron J. Buchan	BDS	737	0.139	2203	0.416	0.556	926
Lovat Enterprises	AYR	347	0.643	354	0.656	1.299	222
J. & D. McGeorge	DMF & GAL	2993	0.360	2386	0.287	0.648	4477
Thomas MacKie & Sons	AYR	752	0.203	1457	0.393	0.596	337
Pringle of Scotland	BDS	11568	0.335	9462	0.274	0.608	9162
James Pringle	HLAND	693	0.095	1790	0.245	0.340	1518
Peter Scott & Co.	BDS	1416	0.217	2212	0.339	0.556	305
Scottish Worsted & Wollens	BDS	2472	0.220	2174	0.194	0.414	1659
Thomas Smith & Co.	ABD	1153	0.171	2454	0.364	0.535	1237
Speyside & Cairngorm Wear	FIFE	617	0.221	1065	0.382	0.603	735
Strathclyde Knitwear	AYR	481	0.212	401	0.176	0.388	146
D.C. Dalgliesh	BDS	-	-	-	-	-	-
The Woolly Mill Co.	DMF & GAL	-	-	-	-	-	-
Bute Fabrics	AGY & BT	577	0.110	3300	0.627	0.737	762
Clan Douglas Knitwear	BDS	493	0.200	134	0.054	0.255	182
J. Templeton & Sons	AYR	32	0.525	-51	-0.836	-0.312	18
MacNaughton Holdings	PTH & KIN	-	-	1470	1.098	-	-
Industry Totals		48114	0.242	75265	0.341	0.553	47710

KNITWEAR MANUFACTURE (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Murray Allan	-	-	-	-	-	-	-
The Ballantyne Sportswear Co.	3.045	4712	2681	1.758	-	-	-
Barrie Knitwear	3.205	3170	1611	1.968	-	-	-
Campsie Knitwear	6.191	2073	1697	1.222	-	-	-
E.W.M. Investments	5.422	13605	6819	1.995	-	-	-
The Edinburgh Woollen Mill	7.380	11600	5831	1.990	-	-	-
Glenhusky of Scotland	2.915	849	408	2.080	-	-	-
Glenmac Knitwear	2.005	2686	2106	1.275	-	-	-
Harrott & Co.	52.403	1569	1364	1.150	-	-	-
Hodgson of Scotland	2.445	1165	879	1.326	-	-	-
Kyle Knitwear	2.674	542	298	1.815	-	-	-
R. Laidlaw & Sons	5.379	1565	1502	1.042	-	-	-
Lochcarron J. Buchan	4.980	2400	1123	2.137	-	-	-
Lovat Enterprises	44.360	519	387	1.341	-	-	-
J. & D. McGeorge	9.754	5630	7721	0.729	-	-	-
Thomas MacKie & Sons	2.339	1884	764	2.467	-	-	-
Pringle of Scotland	5.642	14339	14039	1.021	-	-	-
James Pringle	7.513	1858	1485	1.251	-	-	-
Peter Scott & Co.	1.033	2795	888	3.147	-	-	-
Scottish Worsted & Wollens	3.647	6443	5928	1.087	-	-	-
Thomas Smith & Co.	5.177	2487	1270	1.958	-	-	-
Speyside & Cairngorm Wear	11.481	1225	894	1.370	-	-	-
Strathclyde Knitwear	1.501	809	553	1.462	-	-	-
D.C. Dalgliesh	-	-	-	-	-	-	-
The Woolly Mill Co.	-	-	-	-	-	-	-
Bute Fabrics	13.138	3364	826	4.073	-	-	-
Clan Douglas Knitwear	2.716	1261	1309	0.963	-	-	-
J. Templeton & Sons	3.000	75	144	0.521	-	-	-
MacNaughton Holdings	-	-	166	-	-	-	-
Industry Totals	8.374	88623	62694	1.646	-	-	-

APPENDIX 9 : Oil Services

Firm Data (1983-88)

Contents :

- Profit
- Turnover
- Profit-Sales Ratio (PSR %)
- Annual Sales Growth (Sales %)
- Number of Employees (Emp.)
- Average Revenue Product (ARP)
- Location Code
- Wage Bill
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- Capital Employed
- Input Output Ratio for Capital
- Input Output Ratio (Total)
- Fixed Assets (Fx. Ass.)
- Fixed Assets per Employee (FA/L)
- Current Assets
- Current Liabilities
- Current Ratio (CR)
- Borrowing Ratio (Borrow)
- Income Gearing (Inc. Gr.)
- Export Ratio (XR)

SERVICES TO THE OIL INDUSTRY (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
Aberdeen Service Co.	3765	24043	15.659	576	41.741
Britoil (Development)	790	8211	9.621	174	47.190
Kestrel Marine	2358	34485	6.838	1153	29.909
Lyle Offshore Group PLC	-2761	64036	-4.312	2011	31.843
OIS Group	1384	14996	9.229	513	29.232
RGC Offshore PLC	3857	32850	11.741	837	39.247
Seaforth Maritime	5404	42650	12.671	857	49.767
Star Offshore Services	2037	10428	19.534	269	38.766
John Wood Group	4830	50321	9.598	1725	29.172
Industry Totals	21664	282020	7.682	8115	34.753

SERVICES TO THE OIL INDUSTRY (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Service Co.	4441	25655	17.310	6.705	682	37.617
Britoil (Development)	-819	8821	-9.285	7.429	174	50.695
Kestrel Marine	2158	33076	6.524	-4.086	1026	32.238
Lyle Offshore Group PLC	-6402	58926	-10.864	-7.980	1674	35.201
OIS Group	353	15209	2.321	1.420	525	28.970
RGC Offshore PLC	1178	63539	1.854	93.422	881	72.121
Seaforth Maritime	85	45097	0.188	5.737	823	54.796
Star Offshore Services	2471	10164	24.311	-2.532	239	42.527
John Wood Group	4910	65732	7.470	30.625	2169	30.305
Industry Totals	8375	326219	2.567	15.672	8193	39.817

SERVICES TO THE OIL INDUSTRY (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Service Co.	4452	26781	16.624	4.389	740	36.191
Britoil (Development)	-1284	11164	-11.501	26.562	174	64.161
Kestrel Marine	2418	36555	6.615	10.518	1057	34.584
OIS Group	911	16101	5.658	5.865	557	28.907
RGC Offshore PLC	5260	52316	10.054	-17.663	909	57.553
Seaforth Maritime	-1817	46115	-3.940	2.257	799	57.716
Star Offshore Services	-1377	8225	-16.742	-19.077	238	34.559
John Wood Group	4632	71213	6.504	8.338	2370	30.048
Industry Totals	13195	268470	4.915	-17.703	6844	39.227

SERVICES TO THE OIL INDUSTRY (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Service Co.	ABD	6690	0.278	17382	0.723	1.001	18140
Britoil (Development)	GW	-	-	37856	4.610	-	11134
Kestrel Marine	PTH & KIN	10547	0.306	5606	0.163	0.468	5679
Lyle Offshore Group PLC	ABD	23380	0.365	44432	0.694	1.059	50396
OIS Group	ABD	6993	0.466	4953	0.330	0.797	3536
RGC Offshore PLC	FIFE	9829	0.299	8328	0.254	0.553	4237
Seaforth Maritime	ABD	9889	0.232	44979	1.055	1.286	43958
Star Offshore Services	ABD	3004	0.288	26174	2.510	2.798	23407
John Wood Group	ABD	19054	0.379	23883	0.475	0.853	15138
Industry Totals		89386	0.327	95036	1.201	1.102	175625

SERVICES TO THE OIL INDUSTRY (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Service Co.	ABD	7761	0.303	18129	0.707	1.009	18024
Britoil (Development)	GW	-	-	144704	16.404	-	133619
Kestrel Marine	PTH & KIN	10763	0.325	6162	0.186	0.512	5093
Lyle Offshore Group PLC	ABD	19899	0.338	33239	0.564	0.902	45642
OIS Group	ABD	7503	0.493	4950	0.325	0.819	3841
RGC Offshore PLC	FIFE	10228	0.161	8570	0.135	0.296	10460
Seaforth Maritime	ABD	10061	0.223	41919	0.930	1.153	42173
Star Offshore Services	ABD	2882	0.284	31083	3.058	3.342	25547
John Wood Group	ABD	25229	0.384	28939	0.440	0.824	19635
Industry Totals		94326	0.314	317695	2.528	1.107	304034

SERVICES TO THE OIL INDUSTRY (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Service Co.	ABD	8750	0.327	18019	0.673	1.000	17778
Britoil (Development)	GW	-	-	54018	4.839	-	44180
Kestrel Marine	PTH & KIN	10891	0.298	6254	0.171	0.469	5476
OIS Group	ABD	7170	0.445	4845	0.301	0.746	3505
RGC Offshore PLC	FIFE	11466	0.219	15020	0.287	0.506	11658
Seaforth Maritime	ABD	10587	0.230	38374	0.832	1.062	40414
Star Offshore Services	ABD	2888	0.351	32631	3.967	4.318	33754
John Wood Group	ABD	29017	0.407	26287	0.369	0.777	18667
Industry Totals		80769	0.325	195448	1.430	1.268	175432

SERVICES TO THE OIL INDUSTRY (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Service Co.	31.493	4989	5747	0.868	2.0	20.6	-
Britoil (Development)	63.989	134848	108126	1.247	2.8	-	0.0
Kestrel Marine	4.925	11668	11741	0.994	0.9	23.6	-
Lyle Offshore Group PLC	25.060	23155	29119	0.795	2.8	275.0	-
OIS Group	6.893	5086	3669	1.386	-	12.9	-
RGC Offshore PLC	5.062	16998	12907	1.317	0.1	1.7	0.0
Seaforth Maritime	51.293	18543	17522	1.058	1.0	18.8	-
Star Offshore Services	87.015	6191	3424	1.808	1.1	24.6	-
John Wood Group	8.776	19437	10692	1.818	0.1	7.9	-
Industry Totals	31.612	44171	31638	1.255	1.4	48.1	0.0

SERVICES TO THE OIL INDUSTRY (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Service Co.	26.428	5597	5492	1.019	1.9	16.6	-
Britoil (Development)	767.925	11179	94	118.926	2.9	-	0.0
Kestrel Marine	4.964	4857	3788	1.282	0.1	8.8	-
Lyle Offshore Group PLC	27.265	23155	29119	0.795	4.1	-	-
OIS Group	7.316	6127	4991	1.228	-	50.2	-
RGC Offshore PLC	11.873	24409	20508	1.190	0.0	0.0	0.0
Seaforth Maritime	51.243	14913	15167	0.983	0.9	95.7	-
Star Offshore Services	106.891	8924	3388	2.634	1.2	31.9	-
John Wood Group	9.053	24963	15659	1.594	0.4	9.4	-
Industry Totals	112.551	124124	98206	14.406	1.4	30.4	0.0

SERVICES TO THE OIL INDUSTRY (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Service Co.	24.024	5545	5304	1.045	1.7	17.3	-
Britoil (Development)	253.908	9898	60	164.967	0.4	-	-
Kestrel Marine	5.181	5234	3675	1.424	0.1	6.7	-
OIS Group	6.293	4820	3480	1.385	-	26.2	-
RGC Offshore PLC	12.825	16067	12705	1.265	0.1	3.1	0.0
Seaforth Maritime	50.581	10270	12277	0.837	0.9	-	-
Star Offshore Services	141.824	4069	5192	0.784	1.7	-	-
John Wood Group	7.876	27524	19904	1.383	0.4	18.2	-
Industry Totals	62.814	83427	62597	21.636	0.8	14.3	0.0

SERVICES TO THE OIL INDUSTRY (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Service Co.	2775	15382	18.041	-42.564	456	33.732
Britoil (Development)	-2013	3014	-66.788	-73.003	89	33.865
Kestrel Marine	1853	27552	6.725	-24.629	912	30.211
OIS Group	1025	14259	7.188	-11.440	533	26.752
RGC Offshore PLC	-724	40780	-1.775	-22.051	906	45.011
Seaforth Maritime	-4413	34165	-12.917	-25.913	709	48.188
Star Offshore Services	698	10893	6.408	32.438	257	42.385
John Wood Group	2043	54383	3.757	-23.633	1614	33.695
Industry Totals	1244	200428	0.621	-25.344	5476	36.601

SERVICES TO THE OIL INDUSTRY (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Service Co.	2066	12420	16.634	-19.256	344	36.105
Britoil (Development)	2547	3915	65.057	29.894	97	40.361
Kestrel Marine	1472	26348	5.587	-4.370	860	30.637
OIS Group	487	13222	3.683	-7.273	475	27.836
RGC Offshore PLC	1164	54890	2.121	34.600	915	59.989
Seaforth Maritime	-3803	31173	-12.200	-8.758	602	51.782
Star Offshore Services	-1296	9174	-14.127	-15.781	211	43.479
John Wood Group	2017	61114	3.300	12.377	1724	35.449
Industry Totals	4654	212256	2.193	5.901	5228	40.600

SERVICES TO THE OIL INDUSTRY (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Service Co.	4030	15310	26.323	23.269	298	51.376
Britoil (Development)	2953	4423	66.765	12.976	103	42.942
Kestrel Marine	1501	28227	5.318	7.131	835	33.805
OIS Group	395	13395	2.949	1.308	462	28.994
RGC Offshore PLC	-782	35406	-2.209	-35.496	671	52.766
Seaforth Maritime	-2006	30433	-6.592	-2.374	471	64.614
Star Offshore Services	205	7789	2.632	-15.097	185	42.103
John Wood Group	4515	82263	5.488	34.606	2037	40.384
Industry Totals	10811	217246	4.976	2.351	5062	42.917

SERVICES TO THE OIL INDUSTRY (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Service Co.	ABD	7367	0.479	16449	1.069	1.548	15919
Britoil (Development)	GW	-	-	42743	14.181	-	41196
Kestrel Marine	PTH & KIN	-	-	-	-	-	-
OIS Group	ABD	3912	0.274	6551	0.459	0.734	3754
RGC Offshore PLC	FIFE	12655	0.310	14296	0.351	0.661	11711
Seaforth Maritime	ABD	10172	0.298	35889	1.050	1.348	39766
Star Offshore Services	ABD	3517	0.323	35959	3.301	3.624	35419
John Wood Group	ABD	21104	0.388	25339	0.466	0.854	19609
Industry Totals		58727	0.345	177226	2.983	1.462	167374

SERVICES TO THE OIL INDUSTRY (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Service Co.	ABD	4315	0.347	27681	2.229	2.576	26020
Britoil (Development)	GW	-	-	46514	11.881	-	42348
Kestrel Marine	PTH & KIN	-	-	-	-	-	-
OIS Group	ABD	-	-	-	-	-	-
RGC Offshore PLC	FIFE	13825	0.252	15460	0.282	0.534	11010
Seaforth Maritime	ABD	8545	0.274	18711	0.600	0.874	26064
Star Offshore Services	ABD	2850	0.311	30449	3.319	3.630	30841
John Wood Group	ABD	22578	0.369	27764	0.454	0.824	19061
Industry Totals		52112	0.311	166579	3.127	1.687	155344

SERVICES TO THE OIL INDUSTRY (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Service Co.	ABD	4182	0.273	25233	1.648	1.921	24595
Britoil (Development)	GW	-	-	65167	14.734	-	54495
Kestrel Marine	PTH & KIN	-	-	-	-	-	-
OIS Group	ABD	-	-	-	-	-	-
RGC Offshore PLC	FIFE	11601	0.328	12335	0.348	0.676	9815
Seaforth Maritime	ABD	9851	0.324	35974	1.182	1.506	38475
Star Offshore Services	ABD	2467	0.317	25457	3.268	3.585	27452
John Wood Group	ABD	23396	0.284	26442	0.321	0.606	18422
Industry Totals		51497	0.305	190609	3.584	1.659	173255

SERVICES TO THE OIL INDUSTRY (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Service Co.	34.910	4302	3772	1.141	3.8	5.2	-
Britoil (Development)	462.876	6313	4766	1.325	-	-	-
Kestrel Marine	-	-	-	-	-	-	-
OIS Group	7.043	7854	5043	1.557	-	45.4	-
RGC Offshore PLC	12.926	31323	28738	1.090	1.6	170.3	0.0
Seaforth Maritime	56.087	8070	11947	0.675	1.1	-	-
Star Offshore Services	137.817	7027	6487	1.083	1.9	69.8	-
John Wood Group	12.149	23739	17949	1.323	0.4	30.4	-
Industry Totals	103.401	88628	78702	1.171	1.8	64.2	0.0

SERVICES TO THE OIL INDUSTRY (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Service Co.	75.640	4893	3232	1.514	1.7	4.7	-
Britoil (Development)	436.577	6233	2067	3.015	-	-	-
Kestrel Marine	-	-	-	-	-	-	-
OIS Group	-	-	-	-	-	48.1	-
RGC Offshore PLC	12.033	19207	14757	1.302	0.0	-	0.0
Seaforth Maritime	43.296	7858	15211	0.517	1.0	-	-
Star Offshore Services	146.166	4977	5369	0.927	1.9	-	-
John Wood Group	11.056	33054	24351	1.357	0.4	25.3	-
Industry Totals	120.795	76222	64987	1.439	1.0	26.0	0.0

SERVICES TO THE OIL INDUSTRY (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Service Co.	82.534	4951	4313	1.148	-	-	-
Britoil (Development)	529.082	33694	23023	1.464	-	-	-
Kestrel Marine	-	-	-	-	-	-	-
OIS Group	-	-	-	-	-	-	-
RGC Offshore PLC	14.628	21601	17923	1.205	-	-	-
Seaforth Maritime	81.688	11931	14425	0.827	-	-	-
Star Offshore Services	148.389	3140	5135	0.611	-	-	-
John Wood Group	9.044	25743	17711	1.454	-	-	-
Industry Totals	144.227	101060	82529	1.118	-	-	-

APPENDIX 10 : Paper Manufacture

Firm Data (1983-88)

Contents :

- Profit
- Turnover
- Profit-Sales Ratio (PSR %)
- Annual Sales Growth (Sales %)
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- Current Liabilities
- Current Ratio (CR)
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- Income Gearing (Inc. Gr.)
- Export Ratio (XR)

PAPER MANUFACTURE (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
Davidsons	8148	82059	9.929	2134	38.453
Dexter Speciality Materials	2244	19385	11.576	238	81.450
The Donside Paper Co.	911	23266	3.916	398	58.457
GB Papers	544	19248	2.826	520	37.015
Guard Bridge Paper Co.	335	7965	4.206	207	38.478
Smith, Anderson & Co.	-210	20600	-1.019	778	26.478
W. Sommerville & Son PLC	281	5044	5.571	160	31.525
Thomas Tait & Sons	964	17245	5.590	276	62.482
Tullis Russell & Co.	134	44342	0.302	1604	27.645
J.A. Weir	988	14413	6.855	257	56.082
Industry Totals	14339	253567	5.655	6572	38.583

PAPER MANUFACTURE (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Davidsons	11461	91685	12.500	11.731	2101	43.639
Dexter Speciality Materials	4164	24204	17.204	24.859	265	91.336
The Donside Paper Co.	2516	32697	7.695	40.536	437	74.322
GB Papers	1622	22098	7.340	14.807	507	43.586
Guard Bridge Paper Co.	758	8911	8.506	11.877	200	44.555
Smith, Anderson & Co.	535	23063	2.320	11.956	769	29.991
W. Sommerville & Son PLC	249	5454	4.565	8.128	155	35.187
Thomas Tait & Sons	1228	23196	5.294	34.509	297	78.101
Tullis Russell & Co.	-41	51659	-0.079	16.501	1489	34.694
J.A. Weir	1041	15755	6.607	9.311	268	58.787
Industry Totals	23533	298722	7.878	17.808	6488	46.042

PAPER MANUFACTURE (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Davidsons	ABD	14555	0.177	7469	0.091	0.268	38599
Dexter Speciality Materials	BDS	2571	0.133	10651	0.549	0.682	11371
The Donside Paper Co.	ABD	3167	0.136	6213	0.267	0.403	5480
GB Papers	FIFE	3625	0.188	7481	0.389	0.577	5110
Guard Bridge Paper Co.	FIFE	1356	0.170	5380	0.675	0.846	3908
Smith, Anderson & Co.	FIFE	4834	0.235	7480	0.363	0.598	3520
W. Sommerville & Son PLC	LTH	1009	0.200	1894	0.375	0.576	778
Thomas Tait & Sons	ABD	2422	0.140	11516	0.668	0.808	818
Tullis Russell & Co.	FIFE	9656	0.218	33638	0.759	0.976	26728
J.A. Weir	FIFE	1802	0.125	8155	0.566	0.691	4293
Industry Totals		44997	0.172	99877	0.470	0.643	100605

PAPER MANUFACTURE (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Davidsons	ABD	15534	0.169	12725	0.139	0.308	40891
Dexter Speciality Materials	BDS	2774	0.115	10890	0.450	0.565	12050
The Donside Paper Co.	ABD	3950	0.121	6707	0.205	0.326	5402
GB Papers	FIFE	3821	0.173	9902	0.448	0.621	5167
Guard Bridge Paper Co.	FIFE	1355	0.152	6022	0.676	0.828	3495
Smith, Anderson & Co.	FIFE	5418	0.235	8193	0.355	0.590	3857
W. Sommerville & Son PLC	LTH	1083	0.199	2357	0.432	0.631	884
Thomas Tait & Sons	ABD	2826	0.122	16377	0.706	0.828	11687
Tullis Russell & Co.	FIFE	9944	0.192	34915	0.676	0.868	24461
J.A. Weir	FIFE	1940	0.123	8454	0.537	0.660	4032
Industry Totals		48645	0.160	116542	0.462	0.622	111926

PAPER MANUFACTURE (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Cr	Borrow	Inc. Gr.	XR
Davidsons	18.088	25806	59936	0.431	5.2	-	12.0
Dexter Speciality Materials	47.777	8753	9473	0.924	0.7	0.0	-
The Donside Paper Co.	13.769	8070	7337	1.100	0.3	16.1	-
GB Papers	9.827	7829	5458	1.434	0.2	37.2	18.5
Guard Bridge Paper Co.	18.879	4263	2791	1.527	0.2	13.2	-
Smith, Anderson & Co.	4.524	9294	5334	1.742	0.2	-	0.3
W. Sommerville & Son PLC	4.863	2176	1060	2.053	0.0	0.4	12.5
Thomas Tait & Sons	2.964	6704	3122	2.147	0.1	9.1	8.3
Tullis Russell & Co.	16.663	20626	11692	1.764	0.2	81.1	24.3
J.A. Weir	16.704	6245	2383	2.621	0.1	0.3	8.5
Industry Totals	15.406	99766	108586	1.574	0.7	19.7	12.1

PAPER MANUFACTURE (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Cr	Borrow	Inc. Gr.	XR
Davidsons	19.463	29052	57218	0.508	5.6	-	12.0
Dexter Speciality Materials	45.472	9505	10665	0.891	0.7	2.1	-
The Donside Paper Co.	12.362	12647	11342	1.115	0.4	7.7	-
GB Papers	10.191	10322	5587	1.848	0.1	11.3	17.5
Guard Bridge Paper Co.	17.475	5812	3285	1.769	0.2	6.3	-
Smith, Anderson & Co.	5.016	11040	6704	1.647	0.3	21.3	0.5
W. Sommerville & Son PLC	5.703	2313	1123	2.060	0.1	5.7	14.8
Thomas Tait & Sons	39.350	10291	5601	1.837	0.0	4.7	13.2
Tullis Russell & Co.	16.428	24207	13753	1.760	0.1	19.9	24.8
J.A. Weir	15.045	7963	3541	2.249	0.1	0.3	30.0
Industry Totals	18.650	123152	118819	1.568	0.8	8.8	16.1

PAPER MANUFACTURE (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Davidsons	10569	104440	10.120	13.912	2146	48.667
Dexter Speciality Materials	3345	25585	13.074	5.706	263	97.281
The Donside Paper Co.	3485	36441	9.563	11.451	444	82.074
GB Papers	1536	24730	6.211	11.911	520	47.558
Guard Bridge Paper Co.	709	10031	7.068	12.569	201	49.905
Smith, Anderson & Co.	-395	25753	-1.534	11.664	731	35.230
W. Sommerville & Son PLC	359	6591	5.447	20.847	155	42.523
Thomas Tait & Sons	2467	25458	9.690	9.752	321	79.308
Tullis Russell & Co.	2710	55271	4.903	6.992	1527	36.196
J.A. Weir	1025	18533	5.531	17.632	294	63.037
Industry Totals	25810	332833	7.755	11.419	6602	50.414

PAPER MANUFACTURE (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Davidsons	4939	53573	9.219	-48.705	2112	25.366
Dexter Speciality Materials	4439	28910	15.355	12.996	33	876.061
The Donside Paper Co.	3415	36601	9.330	0.439	460	79.567
GB Papers	3313	30237	10.957	22.268	523	57.815
Guard Bridge Paper Co.	1009	9967	10.123	-0.638	210	47.462
Smith, Anderson & Co.	838	27553	3.041	6.989	708	38.917
W. Sommerville & Son PLC	529	7872	6.720	19.436	169	46.580
Thomas Tait & Sons	-667	31937	-2.088	25.450	372	85.852
Tullis Russell & Co.	4827	65338	7.388	18.214	1473	44.357
J.A. Weir	1177	24721	4.761	33.389	331	74.686
Industry Totals	23819	316709	7.521	-4.844	6391	49.555

PAPER MANUFACTURE (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Davidsons	ABD	17134	0.164	13165	0.126	0.290	45419
Dexter Speciality Materials	BDS	2779	0.109	5526	0.216	0.325	14873
The Donside Paper Co.	ABD	4237	0.116	10045	0.276	0.392	7703
GB Papers	FIFE	3930	0.159	11509	0.465	0.624	6296
Guard Bridge Paper Co.	FIFE	1387	0.138	6715	0.669	0.808	3307
Smith, Anderson & Co.	FIFE	5647	0.219	8083	0.314	0.533	3976
W. Sommerville & Son PLC	LTH	1201	0.182	2357	0.358	0.540	951
Thomas Tait & Sons	ABD	3347	0.131	22696	0.892	1.023	26370
Tullis Russell & Co.	FIFE	11563	0.209	35042	0.634	0.843	10360
J.A. Weir	FIFE	2373	0.128	8513	0.459	0.587	4115
Industry Totals		53598	0.156	123651	0.441	0.597	123370

PAPER MANUFACTURE (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Davidsons	ABD	16862	0.315	2252	0.042	0.357	2245
Dexter Speciality Materials	BDS	3334	0.115	9135	0.316	0.431	16964
The Donside Paper Co.	ABD	4671	0.128	14082	0.385	0.512	10712
GB Papers	FIFE	4200	0.139	14266	0.472	0.611	6848
Guard Bridge Paper Co.	FIFE	1406	0.141	7397	0.742	0.883	2913
Smith, Anderson & Co.	FIFE	5469	0.198	9711	0.352	0.551	5490
W. Sommerville & Son PLC	LTH	1354	0.172	2650	0.337	0.509	1447
Thomas Tait & Sons	ABD	4370	0.137	25328	0.793	0.930	31389
Tullis Russell & Co.	FIFE	12281	0.188	37736	0.578	0.766	24827
J.A. Weir	FIFE	2671	0.108	8650	0.350	0.458	4422
Industry Totals		56618	0.164	131207	0.437	0.601	107257

PAPER MANUFACTURE (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Cr	Borrow	Inc. Gr.	XR
Davidsons	21.164	36259	68513	0.529	5.9	-	15.8
Dexter Speciality Materials	56.551	7370	16717	0.441	2.7	9.6	-
The Donside Paper Co.	17.349	12966	10624	1.220	0.7	15.1	28.2
GB Papers	12.108	10405	5192	2.004	0.2	9.1	24.7
Guard Bridge Paper Co.	16.453	5594	2186	2.559	0.1	6.7	-
Smith, Anderson & Co.	5.439	11349	7282	1.559	0.4	-	0.4
W. Sommerville & Son PLC	6.135	2946	1540	1.913	0.0	6.3	15.8
Thomas Tait & Sons	82.150	8746	12420	0.704	0.6	17.8	12.2
Tullis Russell & Co.	6.785	27357	16997	1.610	0.2	49.9	23.9
J.A. Weir	13.997	7972	3574	2.231	0.1	0.4	28.1
Industry Totals	23.813	130964	145045	1.477	1.1	14.4	18.6

PAPER MANUFACTURE (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Cr	Borrow	Inc. Gr.	XR
Davidsons	1.063	2252	2245	1.003	1.0	-	11.2
Dexter Speciality Materials	514.061	16909	24738	0.684	2.4	8.3	-
The Donside Paper Co.	23.287	13045	9675	1.348	1.1	15.6	25.6
GB Papers	13.094	11493	4645	2.474	0.1	5.6	21.8
Guard Bridge Paper Co.	13.871	6539	2055	3.182	0.1	5.0	0.0
Smith, Anderson & Co.	7.754	11319	7098	1.595	0.4	34.3	0.3
W. Sommerville & Son PLC	8.562	2845	1642	1.733	0.0	0.6	16.5
Thomas Tait & Sons	84.379	14707	20768	0.708	1.2	176.7	14.1
Tullis Russell & Co.	16.855	26112	13203	1.978	0.1	13.0	22.6
J.A. Weir	13.360	8245	3489	2.363	-	-	-
Industry Totals	69.629	113466	89558	1.707	0.7	32.4	14.0

PAPER MANUFACTURE (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Davidsons	7321	86444	8.469	61.357	2098	41.203
Dexter Speciality Materials	5082	30078	16.896	4.040	63	477.429
The Donside Paper Co.	4848	41956	11.555	14.631	456	92.009
GB Papers	4697	33766	13.910	11.671	522	64.686
Guard Bridge Paper Co.	1841	11255	16.357	12.923	214	52.593
Smith, Anderson & Co.	1287	31259	4.117	13.450	765	40.861
W. Sommerville & Son PLC	613	8274	7.409	5.107	177	46.746
Thomas Tait & Sons	-507	49977	-1.014	56.486	480	104.119
Tullis Russell & Co.	6265	70129	8.934	7.333	1404	49.949
J.A. Weir	1321	27439	4.814	10.995	341	80.466
Industry Totals	32768	390577	8.390	23.324	6520	59.904

PAPER MANUFACTURE (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Davidsons	7222	73828	9.782	-14.594	2057	35.891
Dexter Speciality Materials	5046	30473	16.559	1.313	72	423.236
The Donside Paper Co.	5359	46898	11.427	11.779	459	102.174
GB Papers	4728	40094	11.792	18.741	534	75.082
Guard Bridge Paper Co.	2107	12884	16.354	14.474	218	59.101
Smith, Anderson & Co.	829	36836	2.251	17.841	776	47.469
W. Sommerville & Son PLC	866	9620	9.002	16.268	189	50.899
Thomas Tait & Sons	-1805	53896	-3.349	7.842	499	108.008
Tullis Russell & Co.	5841	82160	7.109	17.156	1424	57.697
J.A. Weir	1297	28254	4.591	2.970	349	80.957
Industry Totals	31490	414943	7.589	6.238	6577	63.090

PAPER MANUFACTURE (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Davidsons	ABD	-	-	-	-	-	-
Dexter Speciality Materials	BDS	3588	0.119	10515	0.350	0.469	13052
The Donside Paper Co.	ABD	5234	0.125	16261	0.388	0.512	13498
GB Papers	FIFE	-	-	16970	0.503	-	8407
Guard Bridge Paper Co.	FIFE	-	-	8000	0.711	-	2764
Smith, Anderson & Co.	FIFE	6930	0.222	13757	0.440	0.662	6548
W. Sommerville & Son PLC	LTH	1546	0.187	3004	0.363	0.550	1394
Thomas Tait & Sons	ABD	4370	0.087	25328	0.507	0.594	29874
Tullis Russell & Co.	FIFE	14072	0.201	42996	0.613	0.814	26279
J.A. Weir	FIFE	-	-	-	-	-	-
Industry Totals		35740	0.157	136831	0.484	0.600	101816

PAPER MANUFACTURE (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Davidsons	ABD	-	-	-	-	-	-
Dexter Speciality Materials	BDS	3009	0.099	9343	0.307	0.405	13662
The Donside Paper Co.	ABD	4252	0.091	10662	0.227	0.318	8559
GB Papers	FIFE	-	-	12026	0.300	-	6366
Guard Bridge Paper Co.	FIFE	-	-	6703	0.520	-	3277
Smith, Anderson & Co.	FIFE	5660	0.154	9445	0.256	0.410	4678
W. Sommerville & Son PLC	LTH	1698	0.177	3692	0.384	0.560	1552
Thomas Tait & Sons	ABD	3467	0.064	20249	0.376	0.440	20028
Tullis Russell & Co.	FIFE	14804	0.180	47165	0.574	0.754	28154
J.A. Weir	FIFE	-	-	-	-	-	-
Industry Totals		32889	0.127	119284	0.368	0.481	86276

PAPER MANUFACTURE (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Cr	Borrow	Inc. Gr.	XR
Davidsons	-	-	-	-	-	-	-
Dexter Speciality Materials	207.175	3280	5817	0.564	2.5	7.5	-
The Donside Paper Co.	29.601	17017	14254	1.194	1.0	14.4	25.4
GB Papers	16.105	15609	7046	2.215	0.1	-	20.3
Guard Bridge Paper Co.	12.916	8680	3444	2.520	0.1	5.9	0.0
Smith, Anderson & Co.	8.559	16984	9775	1.737	0.4	-	0.3
W. Sommerville & Son PLC	7.876	3264	1654	1.973	0.0	1.9	14.9
Thomas Tait & Sons	62.238	14563	21046	0.692	0.2	-	13.4
Tullis Russell & Co.	18.717	32248	15531	2.076	0.1	4.7	24.7
J.A. Weir	-	-	-	-	-	-	-
Industry Totals	45.398	91348	58496	1.622	0.6	6.9	14.1

PAPER MANUFACTURE (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Cr	Borrow	Inc. Gr.	XR
Davidsons	-	-	-	-	-	-	-
Dexter Speciality Materials	189.750	9163	13482	0.680	-	-	-
The Donside Paper Co.	18.647	12749	10646	1.197	-	-	-
GB Papers	11.921	11132	5586	1.993	-	-	-
Guard Bridge Paper Co.	15.034	6178	2752	2.245	-	-	-
Smith, Anderson & Co.	6.029	11997	7239	1.657	-	-	-
W. Sommerville & Son PLC	8.212	4014	1874	2.142	-	-	-
Thomas Tait & Sons	40.135	11002	12591	0.874	-	-	-
Tullis Russell & Co.	19.771	35902	16891	2.126	-	-	-
J.A. Weir	-	-	-	-	-	-	-
Industry Totals	38.687	102137	71061	1.614	-	-	-

APPENDIX 11 : Petroleum Distribution

Firm Data (1983-88)

Contents :

- Profit
- Turnover
- Profit-Sales Ratio (PSR %)
- Annual Sales Growth (Sales %)
- Number of Employees (Emp.)
- Average Revenue Product (ARP)
- Location Code
- Wage Bill
- Input-Output Ratio for Labour
- Capital Employed
- Input Output Ratio for Capital
- Input Output Ratio (Total)
- Fixed Assets (Fx. Ass.)
- Fixed Assets per Employee (FA/L)
- Current Assets
- Current Liabilities
- Current Ratio (CR)
- Borrowing Ratio (Borrow)
- Income Gearing (Inc. Gr.)
- Export Ratio (XR)

DISTRIBUTERS OF PETROLEUM PRODUCTS (1983)

Firms	Profit	Turnover	PSR(%)	Emp.	ARP
C.F. Oils	100	8957	1.116	35	255.914
Caledonian Oil Co.	241	15348	1.570	48	319.750
Caley Oils	63	6489	0.971	19	341.526
Ellis & McHardy (Oils)	153	13590	1.126	34	399.706
W. Alexander Industries	329	10062	3.270	158	63.684
Bruce Lindsay Brothers	-9	21626	-0.042	89	242.989
J. Mitchell for Oils	77	6894	1.117	58	118.862
S.E. Oils	-54	8444	-0.640	70	120.629
Fraserburgh Oil Co.	60	918	6.536	5	183.600
Highland Fuels	207	20228	1.023	48	421.417
S. & J.D. Robertson Group	242	26527	0.912	118	224.805
Woodacon Oils	398	3414	11.658	7	487.714
Johnston Oils	160	6216	2.574	21	296.000
Wilsons Fuels	118	8543	1.381	39	219.051
Hurst Fuels	76	5777	1.316	38	152.026
Industry Totals	2161	163033	1.325	787	207.158

DISTRIBUTERS OF PETROLEUM PRODUCTS (1984)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
C.F. Oils	91	8099	1.124	-9.579	34	238.206
Caledonian Oil Co.	210	16682	1.259	8.692	48	347.542
Caley Oils	49	6441	0.761	-0.740	19	339.000
Ellis & McHardy (Oils)	155	15765	0.983	16.004	34	463.676
W. Alexander Industries	415	11592	3.580	15.206	145	79.945
Bruce Lindsay Brothers	45	16793	0.268	-22.348	71	236.521
J. Mitchell for Oils	96	7367	1.303	6.861	60	122.783
S.E. Oils	-127	7824	-1.623	-7.342	62	126.194
Fraserburgh Oil Co.	52	909	5.721	-0.980	5	181.800
Highland Fuels	90	18995	0.474	-6.096	47	404.149
S. & J.D. Robertson Group	216	27818	0.776	4.867	115	241.896
Woodacon Oils	407	3996	10.185	17.047	8	499.500
Johnston Oils	302	8110	3.724	30.470	31	261.613
Wilsons Fuels	191	9792	1.951	14.620	42	233.143
Hurst Fuels	-8	5324	-0.150	-7.841	34	156.588
Industry Totals	2184	165507	1.320	1.517	755	219.215

DISTRIBUTERS OF PETROLEUM PRODUCTS (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
C.F. Oils	FIFE	235	0.026	204	0.023	0.049	72
Caledonian Oil Co.	LTH	360	0.023	528	0.034	0.058	332
Caley Oils	ABD	100	0.015	3	0.000	0.016	0
Ellis & McHardy (Oils)	ABD	207	0.015	614	0.045	0.060	56
W. Alexander Industries	FLK	905	0.090	805	0.080	0.170	617
Bruce Lindsay Brothers	LTH	476	0.022	669	0.031	0.053	420
J. Mitchell for Oils	GW	327	0.047	122	0.018	0.065	420
S.E. Oils	BDS	367	0.043	498	0.059	0.102	234
Fraserburgh Oil Co.	ABD	-	-	-	-	-	-
Highland Fuels	HLAND	-	-	-	-	-	-
S. & J.D. Robertson Group	HLAND	591	0.022	575	0.022	0.044	831
Woodacon Oils	ABD	-	-	-	-	-	-
Johnston Oils	-	-	-	-	-	-	-
Wilsons Fuels	-	-	-	-	-	-	-
Hurst Fuels	AYR	234	0.041	295	0.051	0.092	141
Industry Totals		3802	0.035	4313	0.036	0.071	3123

DISTRIBUTERS OF PETROLEUM PRODUCTS (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
C.F. Oils	FIFE	257	0.032	196	0.024	0.056	59
Caledonian Oil Co.	LTH	403	0.024	591	0.035	0.060	355
Caley Oils	ABD	108	0.017	3	0.000	0.017	0
Ellis & McHardy (Oils)	ABD	233	0.015	768	0.049	0.063	9
W. Alexander Industries	FLK	971	0.084	947	0.082	0.165	620
Bruce Lindsay Brothers	LTH	472	0.028	757	0.045	0.073	464
J. Mitchell for Oils	GW	379	0.051	172	0.023	0.075	447
S.E. Oils	BDS	351	0.045	160	0.020	0.065	245
Fraserburgh Oil Co.	ABD	-	-	-	-	-	-
Highland Fuels	HLAND	-	-	-	-	-	-
S. & J.D. Robertson Group	HLAND	643	0.023	751	0.027	0.050	916
Woodacon Oils	ABD	-	-	-	-	-	-
Johnston Oils	-	-	-	-	-	-	-
Wilsons Fuels	-	-	-	-	-	-	-
Hurst Fuels	AYR	236	0.044	286	0.054	0.098	100
Industry Totals		4053	0.036	4631	0.036	0.072	3215

DISTRIBUTERS OF PETROLEUM PRODUCTS (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
C.F. Oils	2.057	1215	1083	1.122	0.6	13.0	-
Caledonian Oil Co.	6.917	2370	2174	1.090	2.6	18.0	-
Caley Oils	0.000	974	971	1.003	26.0	-	0.0
Ellis & McHardy (Oils)	1.647	1641	1083	1.515	0.0	-	-
W. Alexander Industries	3.905	2067	1879	1.100	0.6	6.0	-
Bruce Lindsay Brothers	4.719	2421	2172	1.115	0.7	110.1	-
J. Mitchell for Oils	7.241	1132	1430	0.792	5.2	14.4	-
S.E. Oils	3.343	1742	1478	1.179	1.7	-	-
Fraserburgh Oil Co.	-	-	-	-	-	-	-
Highland Fuels	-	-	-	-	-	-	-
S. & J.D. Robertson Group	7.042	1417	1673	0.847	0.0	0.5	-
Woodacon Oils	-	-	-	-	-	-	-
Johnston Oils	-	-	-	-	-	-	-
Wilsons Fuels	-	-	-	-	-	-	-
Hurst Fuels	3.711	1508	1353	1.115	0.6	0.0	-
Industry Totals	4.058	16487	15296	1.088	3.8	23.1	0.0

DISTRIBUTERS OF PETROLEUM PRODUCTS (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
C.F. Oils	1.735	800	741	1.080	0.2	9.9	-
Caledonian Oil Co.	7.396	2841	2605	1.091	2.8	21.3	-
Caley Oils	0.000	1038	1035	1.003	9.3	-	0.0
Ellis & McHardy (Oils)	0.265	2229	1470	1.516	0.2	-	-
W. Alexander Industries	4.276	2158	1831	1.179	0.4	5.0	-
Bruce Lindsay Brothers	6.535	2099	1806	1.162	0.9	65.4	-
J. Mitchell for Oils	7.450	1145	1420	0.806	21.7	15.8	-
S.E. Oils	3.952	1853	1938	0.956	1.2	-	-
Fraserburgh Oil Co.	-	-	-	-	-	-	-
Highland Fuels	-	-	-	-	-	-	-
S. & J.D. Robertson Group	7.965	1517	1682	0.902	0.0	0.5	-
Woodacon Oils	-	-	-	-	-	-	-
Johnston Oils	-	-	-	-	-	-	-
Wilsons Fuels	-	-	-	-	-	-	-
Hurst Fuels	2.941	1045	859	1.217	1.3	-	-
Industry Totals	4.251	16725	15387	1.091	3.8	19.7	0.0

DISTRIBUTERS OF PETROLEUM PRODUCTS (1985)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
C.F. Oils	-33	7572	-0.436	-6.507	34	222.706
Caledonian Oil Co.	255	19900	1.281	19.290	48	414.583
Caley Oils	97	8077	1.201	25.400	19	425.105
Ellis & McHardy (Oils)	42	13234	0.317	-16.055	34	389.235
W. Alexander Industries	493	13182	3.740	13.716	163	80.871
Bruce Lindsay Brothers	230	17840	1.289	6.235	62	287.742
J. Mitchell for Oils	107	7604	1.407	3.217	59	128.881
S.E. Oils	75	8098	0.926	3.502	38	213.105
Fraserburgh Oil Co.	46	942	4.883	3.630	5	188.400
Highland Fuels	5	20218	0.025	6.439	48	421.208
S. & J.D. Robertson Group	317	30497	1.039	9.630	116	262.905
Woodacon Oils	510	4215	12.100	5.480	8	526.875
Johnston Oils	291	7555	3.852	-6.843	30	251.833
Wilsons Fuels	270	11180	2.415	14.175	46	243.043
Hurst Fuels	4	7745	0.052	45.473	34	227.794
Industry Totals	2709	177859	1.523	7.463	744	239.058

DISTRIBUTERS OF PETROLEUM PRODUCTS (1986)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
C.F. Oils	-7	6758	-0.104	-10.750	32	211.188
Caledonian Oil Co.	212	18750	1.131	-5.779	51	367.647
Caley Oils	28	6120	0.458	-24.229	18	340.000
Ellis & McHardy (Oils)	50	12977	0.385	-1.942	34	381.676
W. Alexander Industries	325	21561	1.507	63.564	232	92.935
Bruce Lindsay Brothers	166	20025	0.829	12.248	63	317.857
J. Mitchell for Oils	240	7565	3.173	-0.513	62	122.016
S.E. Oils	-130	5293	-2.456	-34.638	34	155.676
Fraserburgh Oil Co.	97	984	9.858	4.459	5	196.800
Highland Fuels	-395	14990	-2.635	-25.858	43	348.605
S. & J.D. Robertson Group	315	36893	0.854	20.973	124	297.524
Woodacon Oils	614	4083	15.038	-3.132	8	510.375
Johnston Oils	327	8375	3.904	10.854	30	279.167
Wilsons Fuels	249	13286	1.874	18.837	51	260.510
Hurst Fuels	-46	6009	-0.766	-22.414	38	158.132
Industry Totals	2045	183669	1.113	3.267	825	222.629

DISTRIBUTERS OF PETROLEUM PRODUCTS (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
C.F. Oils	FIFE	262	0.035	176	0.023	0.058	42
Caledonian Oil Co.	LTH	443	0.022	623	0.031	0.054	258
Caley Oils	ABD	121	0.015	3	0.000	0.015	0
Ellis & McHardy (Oils)	ABD	291	0.022	53	0.004	0.026	83
W. Alexander Industries	FLK	1165	0.088	1358	0.103	0.191	1325
Bruce Lindsay Brothers	LTH	413	0.023	973	0.055	0.078	623
J. Mitchell for Oils	GW	400	0.053	268	0.035	0.088	597
S.E. Oils	BDS	358	0.044	226	0.028	0.072	217
Fraserburgh Oil Co.	ABD	-	-	-	-	-	-
Highland Fuels	HLAND	456	0.023	525	0.026	0.049	318
S. & J.D. Robertson Group	HLAND	717	0.024	1089	0.036	0.059	1282
Woodacon Oils	ABD	85	0.020	2140	0.508	0.528	1672
Johnston Oils	-	-	-	-	-	-	-
Wilsons Fuels	-	-	-	-	-	-	-
Hurst Fuels	AYR	274	0.035	290	0.037	0.073	104
Industry Totals		4985	0.034	7724	0.074	0.108	6521

DISTRIBUTERS OF PETROLEUM PRODUCTS (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
C.F. Oils	FIFE	239	0.035	173	0.026	0.061	55
Caledonian Oil Co.	LTH	-	-	-	-	-	-
Caley Oils	ABD	114	0.019	3	0.000	0.019	0
Ellis & McHardy (Oils)	ABD	-	-	-	-	-	-
W. Alexander Industries	FLK	1724	0.080	1514	0.070	0.150	1604
Bruce Lindsay Brothers	LTH	455	0.023	1061	0.053	0.076	620
J. Mitchell for Oils	GW	461	0.061	396	0.052	0.113	663
S.E. Oils	BDS	351	0.066	125	0.024	0.090	282
Fraserburgh Oil Co.	ABD	-	-	-	-	-	-
Highland Fuels	HLAND	429	0.029	-216	-0.014	0.014	301
S. & J.D. Robertson Group	HLAND	957	0.026	1280	0.035	0.061	2167
Woodacon Oils	ABD	84	0.021	2527	0.619	0.639	1882
Johnston Oils	-	-	-	-	-	-	-
Wilsons Fuels	-	-	-	-	-	-	-
Hurst Fuels	AYR	285	0.047	232	0.039	0.086	108
Industry Totals		5099	0.041	7095	0.090	0.131	7682

DISTRIBUTERS OF PETROLEUM PRODUCTS (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
C.F. Oils	1.235	905	863	1.049	1.2	-	-
Caledonian Oil Co.	5.375	2765	2345	1.179	2.7	-	-
Caley Oils	0.000	1007	1004	1.003	7.3	-	0.0
Ellis & McHardy (Oils)	2.441	1309	1339	0.978	5.0	-	-
W. Alexander Industries	8.129	2993	2960	1.011	1.5	9.5	-
Bruce Lindsay Brothers	10.048	2613	2263	1.155	1.7	12.5	-
J. Mitchell for Oils	10.119	1303	1632	0.798	5.5	16.4	-
S.E. Oils	5.711	1820	1811	1.005	2.6	44.4	-
Fraserburgh Oil Co.	-	-	-	-	-	-	-
Highland Fuels	6.625	2691	2484	1.083	-	-	-
S. & J.D. Robertson Group	11.052	4012	4205	0.954	0.0	0.4	-
Woodacon Oils	209.000	1534	1066	1.439	-	-	-
Johnston Oils	-	-	-	-	-	-	-
Wilsons Fuels	-	-	-	-	-	-	-
Hurst Fuels	3.059	851	659	1.291	1.3	82.6	-
Industry Totals	22.733	23803	22631	1.079	2.9	27.6	0.0

DISTRIBUTERS OF PETROLEUM PRODUCTS (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
C.F. Oils	1.719	766	711	1.077	1.2	150.0	-
Caledonian Oil Co.	-	-	-	-	-	-	0.0
Caley Oils	0.000	603	600	1.005	0.0	-	0.0
Ellis & McHardy (Oils)	-	-	-	-	-	-	-
W. Alexander Industries	6.914	3930	4020	0.978	1.3	29.7	0.0
Bruce Lindsay Brothers	9.841	2806	2365	1.186	0.9	25.6	-
J Mitchell for Oils	10.694	921	1188	0.775	1.5	17.5	0.0
S E. Oils	8.294	951	1108	0.858	5.5	-	-
Fraserburgh Oil Co.	-	-	-	-	-	-	-
Highland Fuels	7.000	2199	2716	0.810	-	-	-
S. & J.D Robertson Group	17.476	5414	6301	0.859	0.0	0.3	-
Woodacon Oils	235.250	1249	604	2.068	-	-	-
Johnston Oils	-	-	-	-	-	-	-
Wilsons Fuels	-	-	-	-	-	-	-
Hurst Fuels	2.842	599	475	1.261	0.7	-	-
Industry Totals	30.003	19438	20088	1.088	1.4	44.6	0.0

DISTRIBUTERS OF PETROLEUM PRODUCTS (1987)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
C.F. Oils	-47	7622	-0.617	12.785	32	238.188
Caledonian Oil Co.	318	24711	1.287	31.792	57	433.526
Caley Oils	37	3528	1.049	-42.353	18	196.000
Ellis & McHardy (Oils)	79	14539	0.543	12.037	37	392.946
W. Alexander Industries	342	15796	2.165	-26.738	191	82.702
Bruce Lindsay Brothers	197	20934	0.941	4.539	67	312.448
J. Mitchell for Oils	355	6176	5.748	-18.361	90	68.622
S.E. Oils	-68	1706	-3.986	-67.769	34	50.176
C.F.	60	2995	2.003	-	5	599.000
Fraserburgh Oil Co.	51	1071	4.762	8.841	5	214.200
Highland Fuels	210	18254	1.150	21.775	47	388.383
S. & J.D. Robertson Group	855	55492	1.541	50.413	140	396.371
Woodacon Oils	571	3983	14.336	-2.449	8	497.875
Johnston Oils	283	8610	3.287	2.806	30	287.000
Wilsons Fuels	284	13170	2.156	-0.873	53	248.491
Industry Totals	3527	198587	1.776	8.122	814	243.964

DISTRIBUTERS OF PETROLEUM PRODUCTS (1988)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
C.F. Oils	99	8751	1.131	14.812	34	257.382
Caledonian Oil Co.	377	28997	1.300	17.345	62	467.694
Caley Oils	26	4346	0.598	23.186	18	241.444
Ellis & McHardy (Oils)	61	13716	0.445	-5.661	40	342.900
W. Alexander Industries	248	9303	2.666	-41.105	157	59.255
Bruce Lindsay Brothers	-46	18795	-0.245	-10.218	73	257.466
J. Mitchell for Oils	-7	5031	-0.139	-18.540	82	61.354
S.E. Oils	-2	31	-6.452	-98.183	4	7.750
C.F.	225	5394	4.171	80.100	8	674.250
Fraserburgh Oil Co.	45	1112	4.047	3.828	6	185.333
Highland Fuels	191	21343	0.895	16.922	52	410.442
S. & J.D. Robertson Group	1209	63999	1.889	15.330	141	453.894
Woodacon Oils	637	4866	13.091	22.169	8	608.250
Johnston Oils	325	10182	3.192	18.258	44	231.409
Wilsons Fuels	294	11935	2.463	-9.377	52	229.519
E.K. Fuel Services	-8	2572	-0.311	-	15	171.467
Mike Povey Fuels	-13	1253	-1.038	-	5	250.600
Industry Totals	3661	211626	1.730	6.566	801	264.202

DISTRIBUTERS OF PETROLEUM PRODUCTS (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
C.F. Oils	FIFE	0	0.000	0	0.000	0.000	0
Caledonian Oil Co.	LTH	-	-	-	-	-	-
Caley Oils	ABD	112	0.032	3	0.001	0.033	0
Ellis & McHardy (Oils)	ABD	-	-	-	-	-	-
W. Alexander Industries	FLK	1516	0.096	1447	0.092	0.188	1668
Bruce Lindsay Brothers	LTH	-	-	1168	0.056	-	644
J. Mitchell for Oils	GW	742	0.120	433	0.070	0.190	877
S.E. Oils	BDS	-	-	-	-	-	-
C.F.	-	-	-	-	-	-	-
Fraserburgh Oil Co.	ABD	-	-	-	-	-	-
Highland Fuels	HLAND	444	0.024	-84	-0.005	0.020	261
S. & J.D. Robertson Group	HLAND	1512	0.027	1686	0.030	0.058	2805
Woodacon Oils	ABD	99	0.025	2899	0.728	0.753	1721
Johnston Oils	-	-	-	-	-	-	-
Wilsons Fuels	-	-	-	-	-	-	-
Industry Totals		4425	0.046	7552	0.121	0.177	7976

DISTRIBUTERS OF PETROLEUM PRODUCTS (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
C.F. Oils	FIFE	199	0.023	150	0.017	0.040	46
Caledonian Oil Co.	LTH	-	-	-	-	-	-
Caley Oils	ABD	111	0.026	3	0.001	0.026	0
Ellis & McHardy (Oils)	ABD	-	-	-	-	-	-
W. Alexander Industries	FLK	1281	0.138	1432	0.154	0.292	1478
Bruce Lindsay Brothers	LTH	-	-	926	0.049	-	554
J. Mitchell for Oils	GW	758	0.151	390	0.078	0.228	942
S.E. Oils	BDS	-	-	-	-	-	-
C.F.	-	-	-	-	-	-	-
Fraserburgh Oil Co.	ABD	-	-	-	-	-	-
Highland Fuels	HLAND	-	-	-	-	-	-
S. & J.D. Robertson Group	HLAND	884	0.014	1076	0.017	0.031	1600
Woodacon Oils	ABD	-	-	-	-	-	-
Johnston Oils	-	-	-	-	-	-	-
Wilsons Fuels	-	-	-	-	-	-	-
E.K. Fuel Services	-	-	-	-	-	-	-
Mike Povey Fuels	-	-	-	-	-	-	-
Industry Totals		3233	0.070	3977	0.053	0.123	4620

DISTRIBUTERS OF PETROLEUM PRODUCTS (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
C.F. Oils	0.000			#DIV/0!	1.0	12.5	-
Caledonian Oil Co.	-	-	-	-	-	-	0.0
Caley Oils	0.000	667	664	1.005	0.5	-	0.0
Ellis & McHardy (Oils)	-	-	-	-	-	-	-
W. Alexander Industries	8.733	2199	2420	0.909	0.7	14.5	0.0
Bruce Lindsay Brothers	9.612	2800	2276	1.230	0.8	25.9	-
J. Mitchell for Oils	9.744	800	1244	0.643	2.6	3.3	0.0
S.E. Oils	-	-	-	-	-	-	-
C.F.	-	-	-	-	-	-	-
Fraserburgh Oil Co.	-	-	-	-	-	-	-
Highland Fuels	5.553	2590	2935	0.882	-	-	-
S. & J.D. Robertson Group	20.036	8474	9593	0.883	0.0	0.3	-
Woodacon Oils	215.125	1919	741	2.590	-	-	-
Johnston Oils	-	-	-	-	-	-	-
Wilsons Fuels	-	-	-	-	-	-	-
Industry Totals	33.600	18782	19209	#DIV/0!	0.9	11.3	0.0

DISTRIBUTERS OF PETROLEUM PRODUCTS (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
C.F. Oils	1.341	0	0	#DIV/0!	-	-	-
Caledonian Oil Co.	-	-	-	-	-	-	0.0
Caley Oils	0.000	858	855	1.004	-	-	0.0
Ellis & McHardy (Oils)	-	-	-	-	-	-	-
W. Alexander Industries	9.414	1532	1578	0.971	-	-	0.0
Bruce Lindsay Brothers	7.592	2548	2176	1.171	-	-	-
J. Mitchell for Oils	11.488	747	1299	0.575	-	-	0.0
S.E. Oils	-	-	-	-	-	-	-
C.F.	-	-	-	-	-	-	-
Fraserburgh Oil Co.	-	-	-	-	-	-	-
Highland Fuels	-	-	-	-	-	-	-
S. & J.D. Robertson Group	11.349	4167	4691	0.888	-	-	-
Woodacon Oils	-	-	-	-	-	-	-
Johnston Oils	-	-	-	-	-	-	-
Wilsons Fuels	-	-	-	-	-	-	-
E.K. Fuel Services	-	-	-	-	-	-	-
Mike Povey Fuels	-	-	-	-	-	-	-
Industry Totals	6.864	9851	10599	#DIV/0!	-	-	0.0

APPENDIX 12 : Plant Hire

Firm Data (1983-88)

Contents :

Profit
Turnover
Profit-Sales Ratio (PSR %)
Annual Sales Growth (Sales %)
Number of Employees (Emp.)
Average Revenue Product (ARP)
Location Code
Wage Bill
Input-Output Ratio for Labour
Capital Employed
Input Output Ratio for Capital
Input Output Ratio (Total)
Fixed Assets (Fx. Ass.)
Fixed Assets per Employee (FA/L)
Current Assets
Current Liabilities
Current Ratio (CR)
Borrowing Ratio (Borrow)
Income Gearing (Inc. Gr.)
Export Ratio (XR)

PLANT HIRE (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
Burnthills & Co.	-64	11356	-0.564	370	30.692
Dundee Plant Co.	98	2193	4.469	99	22.152
Eddison Plant	1702	13822	12.314	426	32.446
Etangin	22	4195	0.524	95	44.158
Fin-Cairn Holdings	50	5375	0.930	166	32.380
Front Line Construction	-52	1421	-3.659	60	23.683
D. Geddes	6	1942	0.309	70	27.743
Grampian Plant Hire	182	5698	3.194	183	31.137
William Griffith	-326	1955	-16.675	72	27.153
Hewden-Stuart Plant PLC	1532	85740	1.787	2614	32.800
L.P.T.	-106	2047	-5.178	89	23.000
John & James Lawrence	168	3896	4.312	46	84.696
L.C. Plant Hire	10	2043	0.489	112	18.241
Lilley Plant	-358	3414	-10.486	131	26.061
McCreath Taylor & Co.	210	10932	1.921	70	156.171
Malcolm Plant	378	2761	13.691	79	34.949
McIntosh Plant Hire	-148	1454	-10.179	74	19.649
Pennant Plant	261	2976	8.770	65	45.785
Powertech (Scotland)	167	1459	11.446	34	42.912
Roche Plant Hire	-88	1858	-4.736	72	25.806
Reekie Plant	202	6095	3.314	80	76.188
Kinleith Plant	22	1557	1.413	49	31.776
Mulholland Holdings	42	2467	1.702	63	39.159
Scot Plant Hire	54	511	10.568	25	20.440
George Anderson Plant	106	3187	3.326	82	38.866
William Dow Holdings	86	758	11.346	27	28.074
R.J. Levack	71	1887	3.763	63	29.952
William Thompson & Sons	245	2491	9.835	102	24.422
Cox Plant (Scotland)	27	191	14.136	3	63.667
Denny Plant Hire	21	374	5.615	9	41.556
Lindsay Plant	45	1012	4.447	46	22.000
Plant & Industrial Supplies	4	404	0.990	8	50.500
Trio Plant	96	3239	2.964	39	83.051
Industry Totals	4665	190710	2.446	5523	34.530

PLANT HIRE (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Burnthills & Co.	GW	2116	0.186	6267	0.552	0.738	11753
Dundee Plant Co.	PTH & KIN	694	0.316	841	0.383	0.700	902
Eddison Plant	PTH & KIN	2940	0.213	13690	0.990	1.203	13684
Etangin	GW	-	-	692	0.165	-	1908
Fin-Cairn Holdings	LNK	1297	0.241	1296	0.241	0.482	1434
Front Line Construction	GW	420	0.296	86	0.061	0.356	117
D. Geddes	ANGUS	-	-	399	0.205	-	878
Grampian Plant Hire	GW	9103	1.598	14365	2.521	4.119	12146
William Griffith	LTH	424	0.217	768	0.393	0.610	816
Hewden-Stuart Plant PLC	GW	18471	0.215	38610	0.450	0.666	44479
L.P.T.	GW	688	0.336	431	0.211	0.547	984
John & James Lawrence	LTH	261	0.067	810	0.208	0.275	839
L.C. Plant Hire	GW	-	-	220	0.108	-	1397
Lilley Plant	GW	898	0.263	3049	0.893	1.156	3350
McCreath Taylor & Co.	GW	333	0.030	1177	0.108	0.138	269
Malcolm Plant	GW	780	0.283	378	0.137	0.419	1758
McIntosh Plant Hire	ABD	592	0.407	242	0.166	0.574	616
Pennant Plant	LTH	609	0.205	1963	0.660	0.864	2697
Powertech (Scotland)	PTH & KIN	189	0.130	279	0.191	0.321	79
Roche Plant Hire	LTH	558	0.300	1270	0.684	0.984	603
Reekie Plant	GW	521	0.085	1544	0.253	0.339	299
Kinleith Plant	LTH	-	-	-	-	-	-
Mulholland Holdings	LTH	-	-	-	-	-	-
Scot Plant Hire	LTH	-	-	-	-	-	-
George Anderson Plant	GW	-	-	-	-	-	-
William Dow Holdings	GW	-	-	-	-	-	-
R.J. Levack	GW	-	-	-	-	-	-
William Thompson & Sons	GW	-	-	-	-	-	-
Cox Plant (Scotland)	-	-	-	-	-	-	-
Denny Plant Hire	FLK	-	-	-	-	-	-
Lindsay Plant	AYR	-	-	-	-	-	-
Plant & Industrial Supplies	LNK	-	-	-	-	-	-
Trio Plant	-	-	-	-	-	-	-
Industry Totals		40894	0.299	88377	0.456	0.805	101008

PLANT HIRE (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.
Burnthills & Co.	31.765	3794	9280	0.409	2.0	106.5
Dundee Plant Co.	9.111	985	1046	0.942	1.3	2.0
Eddison Plant	32.122	4457	4451	1.001	0.2	8.7
Etangin	20.084	1915	3131	0.612	8.7	94.2
Fin-Cairn Holdings	8.639	1531	1669	0.917	0.7	41.9
Front Line Construction	1.950	191	222	0.860	5.0	-
D. Geddes	12.543	495	974	0.508	-	94.3
Grampian Plant Hire	66.372	14151	11932	1.186	0.8	42.3
William Griffith	11.333	486	534	0.910	0.6	-
Hewden-Stuart Plant PLC	17.016	21671	27540	0.787	0.4	60.2
L.P.T.	11.056	570	1023	0.557	3.0	-
John & James Lawrence	18.239	1029	1058	0.973	1.3	16.0
L.C. Plant Hire	12.473	602	1779	0.338	9.5	37.5
Lilley Plant	25.573	314	615	0.511	2.0	-
McCreath Taylor & Co.	3.843	2741	1833	1.495	0.5	0.0
Malcolm Plant	22.253	45	1425	0.032	7.8	6.0
McIntosh Plant Hire	8.324	380	754	0.504	44.1	-
Pennant Plant	41.492	655	1389	0.472	3.4	18.2
Powertech (Scotland)	2.324	548	348	1.575	0.9	4.9
Roche Plant Hire	8.375	975	308	3.166	-	320.0
Reekie Plant	3.738	2685	1440	1.865	0.4	4.3
Kinleith Plant	-	-	-	-	-	-
Mulholland Holdings	-	-	-	-	-	-
Scot Plant Hire	-	-	-	-	-	-
George Anderson Plant	-	-	-	-	-	-
William Dow Holdings	-	-	-	-	-	-
R.J. Levack	-	-	-	-	-	-
William Thompson & Sons	-	-	-	-	-	-
Cox Plant (Scotland)	-	-	-	-	-	-
Denny Plant Hire	-	-	-	-	-	-
Lindsay Plant	-	-	-	-	-	-
Plant & Industrial Supplies	-	-	-	-	-	-
Trio Plant	-	-	-	-	-	-
Industry Totals	17.554	55441	62425	0.934	4.9	53.6

PLANT HIRE (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Burnthills & Co.	219	8241	2.657	-27.430	273	30.187
Dundee Plant Co.	91	2815	3.233	28.363	116	24.267
Eddison Plant	1833	20030	9.151	44.914	482	41.556
Etangin	-264	3677	-7.180	-12.348	84	43.774
Fin-Cairn Holdings	145	6678	2.171	24.242	202	33.059
Front Line Construction	161	1215	13.251	-14.497	60	20.250
D. Geddes	32	2145	1.492	10.453	70	30.643
Grampian Plant Hire	216	5842	3.697	2.527	181	32.276
William Griffith	-143	1454	-9.835	-25.627	47	30.936
Hewden-Stuart Plant PLC	4366	92669	4.711	8.081	2439	37.995
L.P.T.	22	2025	1.086	-1.075	71	28.521
John & James Lawrence	304	4753	6.396	21.997	58	81.948
L.C. Plant Hire	113	2283	4.950	11.747	112	20.384
Lilley Plant	-71	2966	-2.394	-13.122	88	33.705
McCreath Taylor & Co.	316	10281	3.074	-5.955	65	158.169
Malcolm Plant	285	2342	12.169	-15.176	77	30.416
McIntosh Plant Hire	36	1318	2.731	-9.354	76	17.342
Pennant Plant	186	2665	6.979	-10.450	59	45.169
Powertech (Scotland)	198	1637	12.095	12.200	38	43.079
Roche Plant Hire	-258	1623	-15.896	-12.648	67	24.224
Reekie Plant	255	7701	3.311	26.349	84	91.679
Kinleith Plant	31	1842	1.683	18.304	58	31.759
Mulholland Holdings	65	2732	2.379	10.742	76	35.947
Scot Plant Hire	44	469	9.382	-8.219	25	18.760
George Anderson Plant	143	3361	4.255	5.460	89	37.764
William Dow Holdings	49	731	6.703	-3.562	28	26.107
R.J. Levack	109	2333	4.672	23.635	74	31.527
William Thompson & Sons	112	1834	6.107	-26.375	99	18.525
Cox Plant (Scotland)	39	225	17.333	17.801	5	45.000
Denny Plant Hire	30	414	7.246	10.695	13	31.846
Lindsay Plant	64	1378	4.644	36.166	54	25.519
Plant & Industrial Supplies	6	423	1.418	4.703	8	52.875
Trio Plant	97	3111	3.118	-3.952	40	77.775
Industry Totals	8831	203213	4.346	6.556	5318	38.212

PLANT HIRE (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Burnthills & Co.	GW	1406	0.171	5956	0.723	0.893	10095
Dundee Plant Co.	PTH & KIN	815	0.290	959	0.341	0.630	1089
Eddison Plant	PTH & KIN	3056	0.153	15551	0.776	0.929	14761
Etangin	GW	-	-	401	0.109	-	1810
Fin-Cairn Holdings	LNK	1653	0.248	1533	0.230	0.477	1596
Front Line Construction	GW	394	0.324	250	0.206	0.530	167
D. Geddes	ANGUS	-	-	289	0.135	-	675
Grampian Plant Hire	GW	9231	1.580	15717	2.690	4.270	12882
William Griffith	LTH	363	0.250	670	0.461	0.710	689
Hewden-Stuart Plant PLC	GW	18334	0.198	50051	0.540	0.738	45378
L.P.T.	GW	590	0.291	371	0.183	0.475	868
John & James Lawrence	LTH	316	0.066	1194	0.251	0.318	1451
L.C. Plant Hire	GW	683	0.299	177	0.078	0.377	1252
Lilley Plant	GW	727	0.245	2933	0.989	1.234	3329
McCreath Taylor & Co.	GW	379	0.037	1365	0.133	0.170	230
Malcolm Plant	GW	757	0.323	637	0.272	0.595	1961
McIntosh Plant Hire	ABD	610	0.463	220	0.167	0.630	853
Pennant Plant	LTH	605	0.227	1719	0.645	0.872	2650
Powertech (Scotland)	PTH & KIN	294	0.180	452	0.276	0.456	370
Roche Plant Hire	LTH	595	0.367	1170	0.721	1.087	1247
Reekie Plant	GW	590	0.077	1800	0.234	0.310	325
Kinleith Plant	LTH	-	-	-	-	-	-
Mulholland Holdings	LTH	-	-	-	-	-	-
Scot Plant Hire	LTH	-	-	-	-	-	-
George Anderson Plant	GW	-	-	-	-	-	-
William Dow Holdings	GW	-	-	-	-	-	-
R.J. Levack	GW	-	-	-	-	-	-
William Thompson & Sons	GW	-	-	-	-	-	-
Cox Plant (Scotland)	-	-	-	-	-	-	-
Denny Plant Hire	FLK	-	-	-	-	-	-
Lindsay Plant	AYR	-	-	-	-	-	-
Plant & Industrial Supplies	LNK	-	-	-	-	-	-
Trio Plant	-	-	-	-	-	-	-
Industry Totals		41398	0.305	103415	0.484	0.826	103678

PLANT HIRE (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.
Burnthills & Co.	36.978	2602	6741	0.386	1.5	74.4
Dundee Plant Co.	9.388	1078	1208	0.892	1.5	18.8
Eddison Plant	30.624	6088	5298	1.149	-	-
Etangin	21.548	1686	3095	0.545	-	876.5
Fin-Cairn Holdings	7.901	1726	1789	0.965	0.7	28.2
Front Line Construction	2.783	281	198	1.419	0.5	0.6
D. Geddes	9.643	438	824	0.532	-	69.2
Grampian Plant Hire	71.171	14938	12103	1.234	0.7	38.8
William Griffith	14.660	424	443	0.957	0.6	-
Hewden-Stuart Plant PLC	18.605	24655	19982	1.234	0.5	33.0
L.P.T.	12.225	486	983	0.494	3.7	57.7
John & James Lawrence	25.017	2208	2465	0.896	2.8	23.4
L.C. Plant Hire	11.179	921	1996	0.461	9.2	2.6
Lilley Plant	37.830	361	757	0.477	-	-
McCreath Taylor & Co.	3.538	2537	1402	1.810	0.4	0.0
Malcolm Plant	25.468	77	1401	0.055	3.7	8.1
McIntosh Plant Hire	11.224	339	972	0.349	5.9	64.0
Pennant Plant	44.915	490	1421	0.345	2.0	24.7
Powertech (Scotland)	9.737	613	531	1.154	0.7	4.6
Roche Plant Hire	18.612	616	693	0.889	-	-
Reekie Plant	3.869	2722	1247	2.183	0.2	5.6
Kinleith Plant	-	-	-	-	-	-
Mulholland Holdings	-	-	-	-	-	-
Scot Plant Hire	-	-	-	-	-	-
George Anderson Plant	-	-	-	-	-	-
William Dow Holdings	-	-	-	-	-	-
R.J. Levack	-	-	-	-	-	-
William Thompson & Sons	-	-	-	-	-	-
Cox Plant (Scotland)	-	-	-	-	-	-
Denny Plant Hire	-	-	-	-	-	-
Lindsay Plant	-	-	-	-	-	-
Plant & Industrial Supplies	-	-	-	-	-	-
Trio Plant	-	-	-	-	-	-
Industry Totals	20.329	61606	57600	0.877	2.2	78.2

PLANT HIRE (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Burnthills & Co.	212	8360	2.536	1.444	288	29.028
Dundee Plant Co.	77	2917	2.640	3.623	116	25.147
Eddison Plant	2528	18443	13.707	-7.923	475	38.827
Etangin	-113	2745	-4.117	-25.347	66	41.591
Fin-Cairn Holdings	257	8146	3.155	21.983	235	34.664
Front Line Construction	190	1506	12.616	23.951	51	29.529
D. Geddes	-53	2434	-2.177	13.473	67	36.328
Grampian Plant Hire	427	6695	6.378	14.601	178	37.612
William Griffith	-53	1655	-3.202	13.824	43	38.488
Hewden-Stuart Plant PLC	6351	103803	6.118	12.015	2513	41.306
L.P.T.	15	2098	0.715	3.605	69	30.406
John & James Lawrence	546	4199	13.003	-11.656	37	113.486
L.C. Plant Hire	350	2565	13.645	12.352	105	24.429
Lilley Plant	-59	3537	-1.668	19.252	102	34.676
McCreath Taylor & Co.	191	10080	1.895	-1.955	62	162.581
Malcolm Plant	242	2639	9.170	12.681	75	35.187
McIntosh Plant Hire	266	2899	9.176	119.954	76	38.145
Pennant Plant	189	3118	6.062	16.998	67	46.537
Powertech (Scotland)	254	1896	13.397	15.822	44	43.091
Roche Plant Hire	-87	1122	-7.754	-30.869	54	20.778
Reekie Plant	239	8538	2.799	10.869	83	102.867
Kinleith Plant	-37	1699	-2.178	-7.763	72	23.597
Mulholland Holdings	77	3033	2.539	11.018	82	36.988
Scot Plant Hire	31	445	6.966	-5.117	26	17.115
George Anderson Plant	113	3276	3.449	-2.529	92	35.609
William Dow Holdings	78	885	8.814	21.067	32	27.656
R.J. Levack	53	2121	2.499	-9.087	75	28.280
William Thompson & Sons	167	1989	8.396	8.451	96	20.719
Cox Plant (Scotland)	46	287	16.028	27.556	5	57.400
Denny Plant Hire	47	529	8.885	27.778	20	26.450
Lindsay Plant	55	1456	3.777	5.660	60	24.267
Plant & Industrial Supplies	4	401	0.998	-5.201	8	50.125
Trio Plant	93	2857	3.255	-8.165	41	69.683
Industry Totals	12696	218373	5.814	7.460	5415	40.327

PLANT HIRE (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Burnthills & Co.	GW	1610	0.193	6038	0.722	0.915	11041
Dundee Plant Co.	PTH & KIN	834	0.286	1001	0.343	0.629	1102
Eddison Plant	PTH & KIN	3356	0.182	16411	0.890	1.072	16762
Etangin	GW	-	-	-	-	-	-
Fin-Cairn Holdings	LNK	2091	0.257	1944	0.239	0.495	1978
Front Line Construction	GW	397	0.264	372	0.247	0.511	221
D. Geddes	ANGUS	-	-	192	0.079	-	718
Grampian Plant Hire	GW	10042	1.500	21493	3.210	4.710	14766
William Griffith	LTH	340	0.205	628	0.379	0.585	638
Hewden-Stuart Plant PLC	GW	19985	0.193	52579	0.507	0.699	57146
L.P.T.	GW	595	0.284	396	0.189	0.472	798
John & James Lawrence	LTH	263	0.063	1277	0.304	0.367	1473
L.C. Plant Hire	GW	629	0.245	527	0.205	0.451	2430
Lilley Plant	GW	800	0.226	3786	1.070	1.297	3515
McCreath Taylor & Co.	GW	396	0.039	1370	0.136	0.175	255
Malcolm Plant	GW	821	0.311	901	0.341	0.653	1749
McIntosh Plant Hire	ABD	693	0.239	442	0.152	0.392	804
Pennant Plant	LTH	696	0.223	1293	0.415	0.638	2269
Powertech (Scotland)	PTH & KIN	300	0.158	692	0.365	0.523	684
Roche Plant Hire	LTH	610	0.544	1205	1.074	1.618	1361
Reekie Plant	GW	672	0.079	2068	0.242	0.321	483
Kinleith Plant	LTH	-	-	-	-	-	-
Mulholland Holdings	LTH	763	0.252	200	0.066	0.318	381
Scot Plant Hire	LTH	-	-	-	-	-	-
George Anderson Plant	GW	-	-	-	-	-	-
William Dow Holdings	GW	268	0.303	734	0.829	1.132	572
R.J. Levack	GW	-	-	659	0.311	-	612
William Thompson & Sons	GW	-	-	569	0.286	-	619
Cox Plant (Scotland)	-	-	-	-	-	-	-
Denny Plant Hire	FLK	-	-	-	-	-	-
Lindsay Plant	AYR	714	0.490	1265	0.869	1.359	1237
Plant & Industrial Supplies	LNK	-	-	146	0.364	-	168
Trio Plant	-	-	-	-	-	-	-
Industry Totals		46875	0.297	118188	0.532	0.879	123782

PLANT HIRE (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.
Burnthills & Co.	38.337	2709	7712	0.351	1.8	78.1
Dundee Plant Co.	9.500	1178	1345	0.876	-	-
Eddison Plant	35.288	6652	7003	0.950	0.3	13.1
Etangin	-	-	-	-	-	-
Fin-Cairn Holdings	8.417	2162	2196	0.985	1.0	21.6
Front Line Construction	4.333	528	387	1.364	0.5	0.5
D. Geddes	10.716	485	1011	0.480	-	303.8
Grampian Plant Hire	82.955	18129	11402	1.590	0.4	23.3
William Griffith	14.837	366	376	0.973	0.8	-
Hewden-Stuart Plant PLC	22.740	24327	28894	0.842	0.5	28.9
L.P.T.	11.565	567	749	0.757	-	-
John & James Lawrence	39.811	2245	2441	0.920	1.5	22.6
L.C. Plant Hire	23.143	1015	2918	0.348	4.0	2.0
Lilley Plant	34.461	647	376	1.721	-	-
McCreath Taylor & Co.	4.113	2720	1615	1.684	0.4	0.0
Malcolm Plant	23.320	236	1084	0.218	2.1	8.7
McIntosh Plant Hire	10.579	419	781	0.536	2.2	20.4
Pennant Plant	33.866	595	1571	0.379	1.3	32.3
Powertech (Scotland)	15.545	712	704	1.011	0.7	3.3
Roche Plant Hire	25.204	782	674	1.160	-	-
Reekie Plant	5.819	2734	1149	2.379	0.2	2.8
Kinleith Plant	-	-	-	-	-	-
Mulholland Holdings	4.646	497	678	0.733	-	-
Scot Plant Hire	-	-	-	-	-	-
George Anderson Plant	-	-	-	-	-	-
William Dow Holdings	17.875	431	269	1.602	-	-
R.J. Levack	8.160	1154	1107	1.042	-	-
William Thompson & Sons	6.448	651	701	0.929	-	-
Cox Plant (Scotland)	-	-	-	-	-	-
Denny Plant Hire	-	-	-	-	-	-
Lindsay Plant	20.617	792	764	1.037	-	-
Plant & Industrial Supplies	21.000	178	200	0.890	-	-
Trio Plant	-	-	-	-	-	-
Industry Totals	20.511	69024	69050	0.991	1.2	37.5

PLANT HIRE (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Burnthills & Co.	243	9090	2.673	8.732	312	29.135
Dundee Plant Co.	5	3139	0.159	7.611	118	26.602
Eddison Plant	1466	16024	9.149	-13.116	503	31.857
Etangin	-47	2513	-1.870	-8.452	57	44.088
Fin-Cairn Holdings	-3	10240	-0.029	25.706	308	33.247
Front Line Construction	247	2085	11.847	38.446	50	41.700
D. Geddes	58	2447	2.370	0.534	67	36.522
Grampian Plant Hire	513	6377	8.045	-4.750	186	34.285
William Griffith	-263	1229	-21.400	-25.740	35	35.114
Hewden-Stuart Plant PLC	7218	108193	6.671	4.229	2476	43.697
L.P.T.	17	2017	0.843	-3.861	72	28.014
John & James Lawrence	431	5131	8.400	22.196	46	111.543
L.C. Plant Hire	112	2887	3.879	12.554	122	23.664
Lilley Plant	-114	3844	-2.966	8.680	104	36.962
McCreath Taylor & Co.	44	9339	0.471	-7.351	58	161.017
Malcolm Plant	284	2767	10.264	4.850	77	35.935
McIntosh Plant Hire	13	2638	0.493	-9.003	74	35.649
Pennant Plant	172	3428	5.018	9.942	79	43.392
Powertech (Scotland)	-21	1945	-1.080	2.584	52	37.404
Roche Plant Hire	33	985	3.350	-12.210	43	22.907
Reekie Plant	238	8512	2.796	-0.305	94	90.553
Kinleith Plant	-89	1712	-5.199	0.765	67	25.552
Mulholland Holdings	80	3223	2.482	6.264	95	33.926
Scot Plant Hire	38	479	7.933	7.640	26	18.423
George Anderson Plant	188	3741	5.025	14.194	100	37.410
William Dow Holdings	116	958	12.109	8.249	33	29.030
R.J. Levack	112	2662	4.207	25.507	87	30.598
William Thompson & Sons	216	2041	10.583	2.614	99	20.616
Cox Plant (Scotland)	86	355	24.225	23.693	5	71.000
Denny Plant Hire	54	685	7.883	29.490	23	29.783
Lindsay Plant	99	1858	5.328	27.610	76	24.447
Plant & Industrial Supplies	3	360	0.833	-10.224	8	45.000
Trio Plant	81	3016	2.686	5.565	42	71.810
Industry Totals	11630	225920	5.148	3.456	5594	40.386

PLANT HIRE (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Burnthills & Co.	GW	-	-	-256	-0.028	-	815
Dundee Plant Co.	PTH & KIN	936	0.298	891	0.284	0.582	1146
Eddison Plant	PTH & KIN	3941	0.246	16573	1.034	1.280	17141
Etangin	GW	-	-	-	-	-	-
Fin-Cairn Holdings	LNK	2091	0.204	2214	0.216	0.420	1997
Front Line Construction	GW	518	0.248	597	0.286	0.535	236
D. Geddes	ANGUS	-	-	329	0.134	-	713
Grampian Plant Hire	GW	11349	1.780	22272	3.493	5.272	15728
William Griffith	LTH	232	0.189	575	0.468	0.657	560
Hewden-Stuart Plant PLC	GW	21039	0.194	59923	0.554	0.748	58265
L.P.T.	GW	1026	0.509	49	0.024	0.533	847
John & James Lawrence	LTH	300	0.058	1391	0.271	0.330	1347
L.C. Plant Hire	GW	614	0.213	717	0.248	0.461	2324
Lilley Plant	GW	1108	0.288	3820	0.994	1.282	3910
McCreath Taylor & Co.	GW	353	0.038	1320	0.141	0.179	216
Malcolm Plant	GW	849	0.307	1041	0.376	0.683	1642
McIntosh Plant Hire	ABD	594	0.225	659	0.250	0.475	927
Pennant Plant	LTH	843	0.246	1101	0.321	0.567	2274
Powertech (Scotland)	PTH & KIN	492	0.253	857	0.441	0.694	852
Roche Plant Hire	LTH	-	-	-	-	-	-
Reekie Plant	GW	722	0.085	2293	0.269	0.354	483
Kinleith Plant	LTH	430	0.251	454	0.265	0.516	645
Mulholland Holdings	LTH	859	0.267	267	0.083	0.349	406
Scot Plant Hire	LTH	-	-	102	0.213	-	172
George Anderson Plant	GW	721	0.193	1424	0.381	0.573	1444
William Dow Holdings	GW	354	0.370	1106	1.154	1.524	916
R.J. Levack	GW	-	-	796	0.299	-	862
William Thompson & Sons	GW	-	-	673	0.330	-	744
Cox Plant (Scotland)	-	-	-	-	-	-	-
Denny Plant Hire	FLK	-	-	242	0.353	-	349
Lindsay Plant	AYR	928	0.499	1345	0.724	1.223	1571
Plant & Industrial Supplies	LNK	-	-	149	0.414	-	156
Trio Plant	-	-	-	-	-	-	-
Industry Totals		50299	0.316	122924	0.483	0.874	118688

PLANT HIRE (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.
Burnthills & Co.	2.612	684	1755	0.390	1.6	87.4
Dundee Plant Co.	9.712	1139	1394	0.817	-	-
Eddison Plant	34.078	7510	8078	0.930	0.4	5.5
Etangin	-	-	-	-	-	-
Fin-Cairn Holdings	6.484	2779	2562	1.085	0.8	101.8
Front Line Construction	4.720	975	614	1.588	0.5	0.6
D. Geddes	10.642	391	775	0.505	-	-
Grampian Plant Hire	84.559	17337	109793	0.158	0.3	14.8
William Griffith	16.000	404	389	1.039	0.8	-
Hewden-Stuart Plant PLC	23.532	27158	25500	1.065	0.5	29.5
L.P.T.	11.764	788	1586	0.497	-	-
John & James Lawrence	29.283	2273	2229	1.020	1.3	25.9
L.C. Plant Hire	19.049	1022	2629	0.389	3.4	4.5
Lilley Plant	37.596	1003	1093	0.918	-	-
McCreath Taylor & Co.	3.724	2323	1219	1.906	0.3	2.2
Malcolm Plant	21.325	225	826	0.272	1.9	8.3
McIntosh Plant Hire	12.527	583	851	0.685	-	-
Pennant Plant	28.785	629	1802	0.349	1.7	26.9
Powertech (Scotland)	16.385	803	798	1.006	0.6	6.4
Roche Plant Hire	-	-	-	-	-	-
Reekie Plant	5.138	2929	1119	2.618	0.1	0.8
Kinleith Plant	9.627	606	797	0.760	-	-
Mulholland Holdings	4.274	575	714	0.805	-	-
Scot Plant Hire	6.615	187	257	0.728	-	-
George Anderson Plant	14.440	1471	1491	0.987	-	-
William Dow Holdings	27.758	686	496	1.383	-	-
R.J. Levack	9.908	1157	1223	0.946	-	-
William Thompson & Sons	7.515	878	949	0.925	-	-
Cox Plant (Scotland)	-	-	-	-	-	-
Denny Plant Hire	15.174	323	430	0.751	-	-
Lindsay Plant	20.671	755	981	0.770	-	-
Plant & Industrial Supplies	19.500	202	209	0.967	-	-
Trio Plant	-	-	-	-	-	-
Industry Totals	17.703	75972	169410	0.905	1.0	24.2

PLANT HIRE (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Burnthills & Co.	352	9327	3.774	2.607	316	29.516
Dundee Plant Co.	-182	3472	-5.242	10.608	123	28.228
Eddison Plant	2551	22671	11.252	41.482	492	46.079
Etangin	-17	2233	-0.761	-11.142	53	42.132
Fin-Cairn Holdings	283	14229	1.989	38.955	341	41.727
Front Line Construction	176	2408	7.309	15.492	48	50.167
D. Geddes	15	2905	0.516	18.717	64	45.391
Grampian Plant Hire	767	7416	10.343	16.293	197	37.645
William Griffith	-55	122	-45.082	-90.073	5	24.400
Hewden-Stuart Plant PLC	7675	116734	6.575	7.894	2579	45.263
L.P.T.	11	2264	0.486	12.246	76	29.789
John & James Lawrence	339	4942	6.860	-3.683	43	114.930
L.C. Plant Hire	194	3302	5.875	14.375	102	32.373
Lilley Plant	-225	2922	-7.700	-23.985	138	21.174
McCreath Taylor & Co.	113	9872	1.145	5.707	55	179.491
Malcolm Plant	317	2855	11.103	3.180	78	36.603
McIntosh Plant Hire	3	1504	0.199	-42.987	83	18.120
Pennant Plant	165	3569	4.623	4.113	83	43.000
Powertech (Scotland)	-34	2061	-1.650	5.964	66	31.227
Roche Plant Hire	12	1025	1.171	4.061	47	21.809
Reekie Plant	171	9870	1.733	15.954	95	103.895
Kinleith Plant	-111	1762	-6.300	2.921	53	33.245
Mulholland Holdings	175	3810	4.593	18.213	107	35.607
Scot Plant Hire	42	481	8.732	0.418	30	16.033
George Anderson Plant	201	3890	5.167	3.983	103	37.767
William Dow Holdings	151	1151	13.119	20.146	39	29.513
R.J. Levack	162	3307	4.899	24.230	115	28.757
William Thompson & Sons	170	1992	8.534	-2.401	101	19.723
Cox Plant (Scotland)	115	374	30.749	5.352	5	74.800
Denny Plant Hire	19	933	2.036	36.204	32	29.156
Lindsay Plant	236	2464	9.578	32.616	95	25.937
Plant & Industrial Supplies	4	339	1.180	-5.833	7	48.429
Trio Plant	118	3421	3.449	13.428	45	76.022
Industry Totals	13913	249627	5.574	10.494	5816	42.921

PLANT HIRE (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Burnthills & Co.	GW	-	-	-256	-0.027	-	672
Dundee Plant Co.	PTH & KIN	1074	0.309	667	0.192	0.501	1127
Eddison Plant	PTH & KIN	4132	0.182	18189	0.802	0.985	18448
Etangin	GW	-	-	-	-	-	-
Fin-Cairn Holdings	LNK	2231	0.157	2377	0.167	0.324	2112
Front Line Construction	GW	620	0.257	655	0.272	0.529	227
D. Geddes	ANGUS	-	-	289	0.099	-	767
Grampian Plant Hire	GW	12688	1.711	32320	4.358	6.069	20581
William Griffith	LTH	34	0.279	111	0.910	1.189	96
Hewden-Stuart Plant PLC	GW	23487	0.201	66685	0.571	0.772	74095
L.P.T.	GW	-	-	-	-	-	-
John & James Lawrence	LTH	335	0.068	1348	0.273	0.341	1783
L.C. Plant Hire	GW	732	0.222	912	0.276	0.498	2529
Lilley Plant	GW	1227	0.420	3412	1.168	1.588	3528
McCreath Taylor & Co.	GW	390	0.040	1349	0.137	0.176	247
Malcolm Plant	GW	941	0.330	1161	0.407	0.736	1635
McIntosh Plant Hire	ABD	813	0.541	496	0.330	0.870	1173
Pennant Plant	LTH	887	0.249	1120	0.314	0.562	2851
Powertech (Scotland)	PTH & KIN	534	0.259	806	0.391	0.650	896
Roche Plant Hire	LTH	-	-	-	-	-	-
Reekie Plant	GW	818	0.083	2489	0.252	0.335	617
Kinleith Plant	LTH	511	0.290	260	0.148	0.438	589
Mulholland Holdings	LTH	1006	0.264	439	0.115	0.379	532
Scot Plant Hire	LTH	-	-	147	0.306	-	155
George Anderson Plant	GW	915	0.235	974	0.250	0.486	1529
William Dow Holdings	GW	416	0.361	923	0.802	1.163	784
R.J. Levack	GW	-	-	883	0.267	-	822
William Thompson & Sons	GW	-	-	799	0.401	-	721
Cox Plant (Scotland)	-	-	-	-	-	-	-
Denny Plant Hire	FLK	-	-	273	0.293	-	461
Lindsay Plant	AYR	1165	0.473	1723	0.699	1.172	1872
Plant & Industrial Supplies	LNK	-	-	152	0.448	-	165
Trio Plant	-	-	-	-	-	-	-
Industry Totals		54956	0.330	140703	0.522	0.941	378390

PLANT HIRE (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.
Burnthills & Co.	2.127	476	1404	0.339	1.3	-
Dundee Plant Co.	9.163	883	1343	0.657	-	-
Eddison Plant	37.496	8193	8452	0.969	0.3	16.7
Etangin	-	-	-	-	-	-
Fin-Cairn Holdings	6.194	3356	3091	1.086	0.9	25.7
Front Line Construction	4.729	1048	620	1.690	0.4	0.7
D. Geddes	11.984	565	1043	0.542	-	-
Grampian Plant Hire	104.472	33886	23147	1.464	0.3	11.0
William Griffith	19.200	182	167	1.090	0.6	-
Hewden-Stuart Plant PLC	28.730	29776	37186	0.801	0.4	25.0
L.P.T.	-	-	-	-	-	-
John & James Lawrence	41.465	2765	3200	0.864	1.8	24.3
L.C. Plant Hire	24.794	1146	2763	0.415	2.7	3.3
Lilley Plant	25.565	590	706	0.836	-	-
McCreath Taylor & Co.	4.491	2594	1492	1.739	0.3	0.0
Malcolm Plant	20.962	274	748	0.366	2.2	9.4
McIntosh Plant Hire	14.133	730	1407	0.519	-	-
Pennant Plant	34.349	926	2657	0.349	1.2	-
Powertech (Scotland)	13.576	759	798	0.951	0.7	7.1
Roche Plant Hire	-	-	-	-	-	-
Reekie Plant	6.495	3539	1667	2.123	0.2	3.9
Kinleith Plant	11.113	630	959	0.657	-	-
Mulholland Holdings	4.972	786	879	0.894	-	-
Scot Plant Hire	5.167	203	211	0.962	-	-
George Anderson Plant	14.845	1788	2343	0.763	-	-
William Dow Holdings	20.103	724	585	1.238	-	-
R.J. Levack	7.148	1067	1006	1.061	-	-
William Thompson & Sons	7.139	1015	937	1.083	-	-
Cox Plant (Scotland)	-	-	-	-	-	-
Denny Plant Hire	14.406	335	523	0.641	-	-
Lindsay Plant	19.705	1380	1529	0.903	-	-
Plant & Industrial Supplies	23.571	219	232	0.944	-	-
Trio Plant	-	-	-	-	-	-
Industry Totals	19.218	90283	89896	0.927	1.0	11.6

PLANT HIRE (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Burnthills & Co.	-100	8110	-1.233	-13.048	302	26.854
Dundee Plant Co.	12	3906	0.307	12.500	111	35.189
Eddison Plant	2478	25821	9.597	13.894	507	50.929
Etangin	5	1987	0.252	-11.017	48	41.396
Fin-Cairn Holdings	254	12946	1.962	-9.017	343	37.743
Front Line Construction	638	3479	18.339	44.477	53	65.642
D. Geddes	46	3120	1.474	7.401	65	48.000
Grampian Plant Hire	1303	13585	9.591	83.185	254	53.484
William Griffith	59	136	43.382	11.475	2	68.000
Hewden-Stuart Plant PLC	8123	132875	6.113	13.827	2655	50.047
L.P.T.	27	2451	1.102	8.260	77	31.831
John & James Lawrence	322	4768	6.753	-3.521	45	105.956
L.C. Plant Hire	527	3873	13.607	17.293	107	36.196
Lilley Plant	-111	3257	-3.408	11.465	114	28.570
McCreath Taylor & Co.	188	10350	1.816	4.842	51	202.941
Malcolm Plant	374	3018	12.392	5.709	83	36.361
McIntosh Plant Hire	133	3618	3.676	140.559	92	39.326
Pennant Plant	166	4415	3.760	23.704	89	49.607
Powertech (Scotland)	131	2209	5.930	7.181	60	36.817
Roche Plant Hire	23	1178	1.952	14.927	46	25.609
Reekie Plant	333	12174	2.735	23.343	112	108.696
Kinleith Plant	-35	1698	-2.061	-3.632	64	26.531
Mulholland Holdings	192	4713	4.074	23.701	120	39.275
Scot Plant Hire	43	477	9.015	-0.832	30	15.900
George Anderson Plant	745	4360	17.087	12.082	118	36.949
William Dow Holdings	237	1534	15.450	33.275	49	31.306
R.J. Levack	303	5079	5.966	53.583	138	36.804
William Thompson & Sons	472	2197	21.484	10.291	106	20.726
Cox Plant (Scotland)	130	555	23.423	48.396	6	92.500
Denny Plant Hire	165	1231	13.404	31.940	47	26.191
Lindsay Plant	266	2889	9.207	17.248	110	26.264
Plant & Industrial Supplies	5	402	1.244	18.584	8	50.250
Trio Plant	112	3681	3.043	7.600	45	81.800
Industry Totals	17566	286092	6.140	14.608	6057	47.233

PLANT HIRE (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Burnthills & Co.	GW	-	-	-225	-0.028	-	652
Dundee Plant Co.	PTH & KIN	871	0.223	872	0.223	0.446	1073
Eddison Plant	PTH & KIN	3485	0.135	16083	0.623	0.758	16159
Etangin	GW	-	-	-	-	-	-
Fin-Cairn Holdings	LNK	3164	0.244	2161	0.167	0.411	2216
Front Line Construction	GW	829	0.238	1046	0.301	0.539	512
D. Geddes	ANGUS	-	-	300	0.096	-	750
Grampian Plant Hire	GW	21440	1.578	37230	2.741	4.319	24883
William Griffith	LTH	279	2.049	550	4.047	6.096	560
Hewden-Stuart Plant PLC	GW	20263	0.152	53570	0.403	0.556	55873
L.P.T.	GW	-	-	-	-	-	-
John & James Lawrence	LTH	295	0.062	1204	0.253	0.314	1379
L.C. Plant Hire	GW	817	0.211	1238	0.320	0.531	2488
Lilley Plant	GW	1061	0.326	3221	0.989	1.315	2548
McCreath Taylor & Co.	GW	370	0.036	1316	0.127	0.163	243
Malcolm Plant	GW	830	0.275	824	0.273	0.548	1749
McIntosh Plant Hire	ABD	660	0.183	412	0.114	0.296	875
Pennant Plant	LTH	728	0.165	1439	0.326	0.491	2548
Powertech (Scotland)	PTH & KIN	475	0.215	936	0.424	0.639	932
Roche Plant Hire	LTH	-	-	-	-	-	-
Reekie Plant	GW	665	0.055	2039	0.167	0.222	441
Kinleith Plant	LTH	700	0.412	136	0.080	0.492	518
Mulholland Holdings	LTH	-	-	-	-	-	-
Scot Plant Hire	LTH	-	-	160	0.335	-	162
George Anderson Plant	GW	1056	0.242	1464	0.336	0.578	1701
William Dow Holdings	GW	-	-	-	-	-	-
R.J. Levack	GW	-	-	-	-	-	-
William Thompson & Sons	GW	-	-	-	-	-	-
Cox Plant (Scotland)	-	-	-	-	-	-	-
Denny Plant Hire	FLK	-	-	436	0.354	-	554
Lindsay Plant	AYR	-	-	-	-	-	-
Plant & Industrial Supplies	LNK	-	-	-	-	-	-
Trio Plant	-	-	-	-	-	-	-
Industry Totals		57987	0.378	126411	0.576	1.040	118816

PLANT HIRE (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.
Burnthills & Co.	2.159	559	1438	0.389	-	-
Dundee Plant Co.	9.668	1053	1267	0.831	-	-
Eddison Plant	31.872	6580	6656	0.989	-	-
Etangin	-	-	-	-	-	-
Fin-Cairn Holdings	6.461	3256	3311	0.983	-	-
Front Line Construction	9.660	1573	1039	1.514	-	-
D. Geddes	11.542	475	925	0.513	-	-
Grampian Plant Hire	97.965	44418	32071	1.385	-	-
William Griffith	279.900	372	382	0.975	-	-
Hewden-Stuart Plant PLC	21.044	25517	27820	0.917	-	-
L.P.T.	-	-	-	-	-	-
John & James Lawrence	30.636	2104	2279	0.923	-	-
L.C. Plant Hire	23.252	1170	2420	0.483	-	-
Lilley Plant	22.351	875	202	4.332	-	-
McCreath Taylor & Co.	4.773	2583	1512	1.708	-	-
Malcolm Plant	21.072	171	1097	0.156	-	-
McIntosh Plant Hire	9.507	490	953	0.514	-	-
Pennant Plant	28.631	659	1768	0.373	-	-
Powertech (Scotland)	15.533	801	797	1.005	-	-
Roche Plant Hire	-	-	-	-	-	-
Reekie Plant	3.941	2922	1324	2.206	-	-
Kinleith Plant	8.094	439	903	0.486	-	-
Mulholland Holdings	-	-	-	-	-	-
Scot Plant Hire	5.400	201	203	0.990	-	-
George Anderson Plant	14.415	2028	2265	0.895	-	-
William Dow Holdings	-	-	-	-	-	-
R.J. Levack	-	-	-	-	-	-
William Thompson & Sons	-	-	-	-	-	-
Cox Plant (Scotland)	-	-	-	-	-	-
Denny Plant Hire	11.787	626	744	0.841	-	-
Lindsay Plant	-	-	-	-	-	-
Plant & Industrial Supplies	-	-	-	-	-	-
Trio Plant	-	-	-	-	-	-
Industry Totals	30.439	98873	91377	1.064	-	-

APPENDIX 13 : Slaughterers & Meat Processors

Firm Data (1983-88)

Contents :

Profit
Turnover
Profit-Sales Ratio (PSR %)
Annual Sales Growth (Sales %)
Number of Employees (Emp.)
Average Revenue Product (ARP)
Location Code
Wage Bill
Input-Output Ratio for Labour
Capital Employed
Input Output Ratio for Capital
Input Output Ratio (Total)
Fixed Assets (Fx. Ass.)
Fixed Assets per Employee (FA/L)
Current Assets
Current Liabilities
Current Ratio (CR)
Borrowing Ratio (Borrow)
Income Gearing (Inc. Gr.)
Export Ratio (XR)

SLAUGHTERERS & MEAT PROCESSORS (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
Campbell's Prime Meat	22	7276	0.302	61	119.279
J. Chapman	55	3622	1.518	127	28.520
Euroscot Meat	188	22115	0.850	108	204.769
Forfar Meat Traders	19	1549	1.227	6	258.167
W. Forrest & Son	74	22002	0.336	187	117.658
J.W. Galloway	-858	22113	-3.880	478	46.262
Grants of Dornoch	123	4572	2.690	65	70.338
David A. Hall	563	22945	2.454	722	31.780
Inverclyde Meats	60	1547	3.878	30	51.567
J. McIntosh & Co.	46	13635	0.337	80	170.438
A. McKechnie & Co.	-5	1507	-0.332	9	167.444
McKellar Watt	-1099	13517	-8.131	493	27.418
Maxco Foods	74	4447	1.664	100	44.470
Sandyford Foods	26	5988	0.434	78	76.769
Scotbeef	-679	17876	-3.798	233	76.721
Stewart Brothers	-115	4729	-2.432	207	22.845
W. Bosoworth & Sons	7	437	1.602	12	36.417
British Beef Co.	378	104921	0.360	1050	99.925
R.Y. Henderson & Sons	25	847	2.952	21	40.333
McIntosh Donald	59	16921	0.349	107	158.140
Calder Millerfied	97	1649	5.882	75	21.987
J. Campbell	4	3749	0.107	62	60.468
Nimmo Holdings	95	2481	3.829	59	42.051
J. Kelly & Sons	18	1873	0.961	19	98.579
Industry Totals	-823	302318	-0.272	4389	68.881

SLAUGHTERERS & MEAT PROCESSORS (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Campbell's Prime Meat	LTH	320	0.044	442	0.061	0.105	416
J. Chapman	LNK	615	0.170	633	0.175	0.345	624
Euroscot Meat	LTH	738	0.033	1047	0.047	0.081	965
Forfar Meat Traders	ANGUS	31	0.020	40	0.026	0.046	29
W. Forrest & Son	LNK	1421	0.065	10395	0.472	0.537	7066
J.W. Galloway	GW	2229	0.101	1392	0.063	0.164	2844
Grants of Dornoch	HLAND	427	0.093	465	0.102	0.195	381
David A. Hall	LTH	5038	0.220	7750	0.338	0.557	7135
Inverclyde Meats	GW	103	0.067	99	0.064	0.131	57
J. McIntosh & Co.	ABD	463	0.034	1452	0.106	0.140	1590
A. McKechnie & Co.	GW	-	-	100	0.066	-	145
McKellar Watt	GW	3424	0.253	5460	0.404	0.657	6428
Maxco Foods	LTH	-	-	450	0.101	-	729
Sandyford Foods	AYR	452	0.075	648	0.108	0.184	736
Scotbeef	GW	1250	0.070	-485	-0.027	0.043	1313
Stewart Brothers	GW	820	0.173	278	0.059	0.232	720
W. Bosoworth & Sons	LTH	-	-	-	-	-	-
British Beef Co.	BDS	-	-	-	-	-	-
R.Y. Henderson & Sons	LTH	-	-	-	-	-	-
McIntosh Donald	-	-	-	-	-	-	-
Calder Millerfied	GW	-	-	-	-	-	-
J. Campbell	-	-	-	-	-	-	-
Nimmo Holdings	AYR	-	-	-	-	-	-
J. Kelly & Sons	LNK	176	0.094	644	0.344	0.438	417
Industry Totals		17507	0.101	30810	0.148	0.257	31595

SLAUGHTERERS & MEAT PROCESSORS (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Campbell's Prime Meat	6.820	1065	1039	1.025	2.7	60.7	0.0
J. Chapman	4.913	174	165	1.055	0.0	0.0	-
Euroscot Meat	8.935	2420	2324	1.041	1.8	41.9	0.0
Forfar Meat Traders	4.833	113	94	1.202	1.4	38.7	-
W. Forrest & Son	37.786	4990	1661	3.004	0.2	78.1	13.4
J.W. Galloway	5.950	1724	3176	0.543	1.8	-	0.5
Grants of Dornoch	5.862	948	864	1.097	1.6	40.3	-
David A. Hall	9.882	3487	2872	1.214	0.3	25.0	-
Inverclyde Meats	1.900	200	158	1.266	0.1	-	-
J. McIntosh & Co.	19.875	1081	1219	0.887	1.2	76.4	0.0
A. McKechnie & Co.	16.111	136	181	0.751	2.7	155.6	0.0
McKellar Watt	13.039	2671	3639	0.734	1.2	-	0.2
Maxco Foods	7.290	476	755	0.630	1.5	37.3	0.0
Sandyford Foods	9.436	759	847	0.896	1.2	59.4	0.0
Scotbeef	5.635	1996	3794	0.526	-	-	0.6
Stewart Brothers	3.478	517	959	0.539	1.9	-	0.0
W. Bosworth & Sons	-	-	-	-	-	-	-
British Beef Co.	-	-	-	-	-	-	-
R.Y. Henderson & Sons	-	-	-	-	-	-	-
McIntosh Donald	-	-	-	-	-	-	-
Calder Millerfied	-	-	-	-	-	-	-
J. Campbell	-	-	-	-	-	-	-
Nimmo Holdings	-	-	-	-	-	-	-
J. Kelly & Sons	21.947	478	251	1.904	0.1	0.0	-
Industry Totals	10.805	19463	20376	1.077	1.2	51.1	1.3

SLAUGHTERERS & MEAT PROCESSORS (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Campbell's Prime Meat	83	8793	0.944	20.849	67	131.239
J. Chapman	82	3638	2.254	0.442	134	27.149
Euroscot Meat	218	24686	0.883	11.626	131	188.443
Forfar Meat Traders	0	1298	0.000	-16.204	7	185.429
W. Forrest & Son	1025	30331	3.379	37.856	245	123.800
J.W. Galloway	-731	17901	-4.084	-19.048	359	49.864
Grants of Dornoch	-56	4239	-1.321	-7.283	82	51.695
David A. Hall	-285	25891	-1.101	12.839	811	31.925
Inverclyde Meats	68	1880	3.617	21.526	29	64.828
J. McIntosh & Co.	267	14578	1.832	6.916	86	169.512
A. McKechnie & Co.	-5	1612	-0.310	6.967	10	161.200
McKellar Watt	-676	13313	-5.078	-1.509	413	32.235
Maxco Foods	25	4544	0.550	2.181	105	43.276
Sandyford Foods	38	6064	0.627	1.269	74	81.946
Scotbeef	-564	14745	-3.825	-17.515	194	76.005
Stewart Brothers	-10	4672	-0.214	-1.205	220	21.236
W. Bosoworth & Sons	2	396	0.505	-9.382	13	30.462
British Beef Co.	591	126921	0.466	20.968	1050	120.877
R.Y. Henderson & Sons	40	959	4.171	13.223	21	45.667
McIntosh Donald	58	20034	0.290	18.397	122	164.213
Calder Millerfied	137	2112	6.487	28.078	93	22.710
J. Campbell	35	4289	0.816	14.404	66	64.985
Nimmo Holdings	90	3176	2.834	28.013	76	41.789
J. Kelly & Sons	14	2155	0.650	15.056	23	93.696
Industry Totals	446	338227	0.132	11.878	4431	76.332

SLAUGHTERERS & MEAT PROCESSORS (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Campbell's Prime Meat	LTH	369	0.042	508	0.058	0.100	476
J. Chapman	LNK	639	0.176	740	0.203	0.379	754
Euroscot Meat	LTH	909	0.037	1192	0.048	0.085	1004
Forfar Meat Traders	ANGUS	35	0.027	40	0.031	0.058	24
W. Forrest & Son	LNK	1754	0.058	9278	0.306	0.364	5326
J.W. Galloway	GW	1803	0.101	1389	0.078	0.178	2272
Grants of Dornoch	HLAND	417	0.098	404	0.095	0.194	412
David A. Hall	LTH	5781	0.223	8351	0.323	0.546	8523
Inverclyde Meats	GW	167	0.089	181	0.096	0.185	112
J. McIntosh & Co.	ABD	649	0.045	1630	0.112	0.156	1587
A. McKechnie & Co.	GW	-	-	141	0.087	-	195
McKellar Watt	GW	2941	0.221	4496	0.338	0.559	6097
Maxco Foods	LTH	-	-	511	0.112	-	890
Sandyford Foods	AYR	420	0.069	622	0.103	0.172	715
Scotbeef	GW	1144	0.078	-978	-0.066	0.011	1450
Stewart Brothers	GW	909	0.195	263	0.056	0.251	701
W. Bosoworth & Sons	LTH	-	-	-	-	-	-
British Beef Co.	BDS	-	-	-	-	-	-
R.Y. Henderson & Sons	LTH	-	-	-	-	-	-
McIntosh Donald	-	-	-	-	-	-	-
Calder Millerfied	GW	-	-	-	-	-	-
J. Campbell	-	-	-	-	-	-	-
Nimmo Holdings	AYR	-	-	-	-	-	-
J. Kelly & Sons	LNK	193	0.090	697	0.323	0.413	384
Industry Totals		18130	0.103	29465	0.135	0.243	30922

SLAUGHTERERS & MEAT PROCESSORS (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Campbell's Prime Meat	7.104	1447	1415	1.023	2.5	47.5	0.0
J. Chapman	5.627	158	172	0.919	0.0	0.0	-
Euroscot Meat	7.664	3018	2802	1.077	1.7	41.4	0.8
Forfar Meat Traders	3.429	130	114	1.140	1.9	100.0	-
W. Forrest & Son	21.739	5963	2011	2.965	0.2	15.6	18.2
J.W. Galloway	6.329	2079	2962	0.702	1.6	-	1.9
Grants of Dornoch	5.024	815	823	0.990	1.7	722.2	-
David A. Hall	10.509	3953	4125	0.958	0.4	-	-
Inverclyde Meats	3.862	283	214	1.322	0.3	-	-
J. McIntosh & Co.	18.453	1509	1466	1.029	0.9	31.4	0.0
A. McKechnie & Co.	19.500	182	236	0.771	1.4	155.6	0.0
McKellar Watt	14.763	2964	4565	0.649	1.7	-	0.1
Maxco Foods	8.476	614	993	0.618	1.6	69.9	0.0
Sandyford Foods	9.662	731	824	0.887	0.6	38.7	0.0
Scotbeef	7.474	2357	4785	0.493	-	-	2.3
Stewart Brothers	3.186	453	891	0.508	2.1	125.0	0.0
W. Bosoworth & Sons	-	-	-	-	-	-	-
British Beef Co.	-	-	-	-	-	-	-
R.Y. Henderson & Sons	-	-	-	-	-	-	-
McIntosh Donald	-	-	-	-	-	-	-
Calder Millerfied	-	-	-	-	-	-	-
J. Campbell	-	-	-	-	-	-	-
Nimmo Holdings	-	-	-	-	-	-	-
J. Kelly & Sons	16.696	548	235	2.332	0.1	1.2	-
Industry Totals	9.970	22451	24130	1.081	1.2	112.4	2.1

SLAUGHTERERS & MEAT PROCESSORS (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Campbell's Prime Meat	91	11093	0.820	26.157	78	142.218
J. Chapman	76	3738	2.033	2.749	128	29.203
Euroscot Meat	-172	26734	-0.643	8.296	136	196.574
Forfar Meat Traders	-20	1333	-1.500	2.696	7	190.429
W. Forrest & Son	1575	17523	8.988	-42.227	186	94.210
J.W. Galloway	48	23000	0.209	28.484	344	66.860
Grants of Dornoch	-7	5168	-0.135	21.916	90	57.422
David A. Hall	172	28549	0.602	10.266	893	31.970
Inverclyde Meats	42	2125	1.976	13.032	31	68.548
J. McIntosh & Co.	210	17269	1.216	18.459	94	183.713
A. McKechnie & Co.	12	1899	0.632	17.804	12	158.250
McKellar Watt	-1068	11818	-9.037	-11.230	391	30.225
Maxco Foods	-152	4204	-3.616	-7.482	104	40.423
Sandyford Foods	71	4434	1.601	-26.880	68	65.206
Scotbeef	155	19513	0.794	32.336	192	101.630
Stewart Brothers	60	5456	1.100	16.781	283	19.279
W. Bosoworth & Sons	16	506	3.162	27.778	15	33.733
British Beef Co.	273	129631	0.211	2.135	1135	114.212
R.Y. Henderson & Sons	55	1235	4.453	28.780	32	38.594
McIntosh Donald	79	23891	0.331	19.252	138	173.123
Calder Millerfied	136	2079	6.542	-1.563	96	21.656
J. Campbell	54	4812	1.122	12.194	71	67.775
Nimmo Holdings	82	3211	2.554	1.102	84	38.226
J. Kelly & Sons	18	2590	0.695	20.186	28	92.500
Industry Totals	1806	351811	0.513	4.016	4636	75.887

SLAUGHTERERS & MEAT PROCESSORS (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Campbell's Prime Meat	LTH	440	0.040	573	0.052	0.091	513
J. Chapman	LNK	655	0.175	839	0.224	0.400	821
Euroscot Meat	LTH	1126	0.042	940	0.035	0.077	1019
Forfar Meat Traders	ANGUS	40	0.030	10	0.008	0.038	19
W. Forrest & Son	LNK	1404	0.080	9537	0.544	0.624	3607
J.W. Galloway	GW	1986	0.086	2404	0.105	0.191	2601
Grants of Dornoch	HLAND	476	0.092	389	0.075	0.167	384
David A. Hall	LTH	6199	0.217	8389	0.294	0.511	8133
Inverclyde Meats	GW	176	0.083	229	0.108	0.191	154
J. McIntosh & Co.	ABD	743	0.043	1431	0.083	0.126	1409
A. McKechnie & Co.	GW	-	-	123	0.065	-	187
McKellar Watt	GW	2777	0.235	6326	0.535	0.770	5840
Maxco Foods	LTH	-	-	620	0.147	-	752
Sandyford Foods	AYR	454	0.102	490	0.111	0.213	575
Scotbeef	GW	1279	0.066	143	0.007	0.073	1680
Stewart Brothers	GW	1004	0.184	317	0.058	0.242	679
W. Bosoworth & Sons	LTH	-	-	-	-	-	-
British Beef Co.	BDS	-	-	-	-	-	-
R.Y. Henderson & Sons	LTH	-	-	-	-	-	-
McIntosh Donald	-	-	-	-	-	-	-
Calder Millerfied	GW	496	0.239	620	0.298	0.537	243
J. Campbell	-	-	-	-	-	-	-
Nimmo Holdings	AYR	-	-	-	-	-	-
J. Kelly & Sons	LNK	206	0.080	779	0.301	0.380	405
Industry Totals		19461	0.112	34159	0.169	0.289	29021

SLAUGHTERERS & MEAT PROCESSORS (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Campbell's Prime Meat	6.577	1843	1783	1.034	2.1	48.0	0.0
J. Chapman	6.414	264	246	1.073	0.1	0.0	-
Euroscot Meat	7.493	2613	2637	0.991	1.7	-	5.3
Forfar Meat Traders	2.714	190	199	0.955	12.8	-	-
W. Forrest & Son	19.392	7398	1184	6.248	0.2	10.8	3.5
J.W. Galloway	7.561	2984	3181	0.938	1.1	79.4	5.1
Grants of Dornoch	4.267	993	988	1.005	2.1	108.6	-
David A. Hall	9.108	3955	3699	1.069	0.4	65.2	-
Inverclyde Meats	4.968	298	223	1.336	0.4	-	-
J. McIntosh & Co.	14.989	1873	1851	1.012	1.0	45.3	0.0
A. McKechnie & Co.	15.583	198	222	0.892	-	-	-
McKellar Watt	14.936	2486	2000	1.243	0.5	-	-
Maxco Foods	7.231	928	1060	0.875	1.3	-	0.0
Sandyford Foods	8.456	515	600	0.858	0.7	26.8	0.0
Scotbeef	8.750	3452	4989	0.692	-	53.9	6.0
Stewart Brothers	2.399	588	950	0.619	1.0	46.9	0.0
W. Bosoworth & Sons	-	-	-	-	-	-	-
British Beef Co.	-	-	-	-	-	-	-
R.Y. Henderson & Sons	-	-	-	-	-	-	-
McIntosh Donald	-	-	-	-	-	-	-
Calder Millerfied	2.531	528	151	3.497	-	-	-
J. Campbell	-	-	-	-	-	-	-
Nimmo Holdings	-	-	-	-	-	-	-
J. Kelly & Sons	14.464	647	273	2.370	0.1	1.6	-
Industry Totals	8.769	26843	21371	1.484	1.7	44.2	2.2

SLAUGHTERERS & MEAT PROCESSORS (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Campbell's Prime Meat	20	12112	0.165	9.186	83	145.928
J. Chapman	89	3794	2.346	1.498	126	30.111
Euroscot Meat	218	30113	0.724	12.639	140	215.093
Forfar Meat Traders	-20	1044	-1.916	-21.680	6	174.000
W. Forrest & Son	852	9575	8.898	-45.358	140	68.393
J.W. Galloway	-48	24641	-0.195	7.135	336	73.336
Grants of Dornoch	57	5783	0.986	11.900	88	65.716
David A. Hall	-229	28199	-0.812	-1.226	906	31.125
Inverclyde Meats	31	2099	1.477	-1.224	31	67.710
J. McIntosh & Co.	-42	16917	-0.248	-2.038	92	183.880
A. McKechnie & Co.	11	1887	0.583	-0.632	12	157.250
McKellar Watt	304	10870	2.797	-8.022	366	29.699
Maxco Foods	-11	2176	-0.506	-48.240	91	23.912
Sandyford Foods	117	3517	3.327	-20.681	66	53.288
Scotbeef	62	21154	0.293	8.410	195	108.482
Stewart Brothers	122	6658	1.832	22.031	295	22.569
W. Bosoworth & Sons	13	489	2.658	-3.360	15	32.600
British Beef Co.	116	138424	0.084	6.783	1275	108.568
R.Y. Henderson & Sons	37	1183	3.128	-4.211	32	36.969
McIntosh Donald	105	22102	0.475	-7.488	143	154.559
Calder Millerfied	161	2226	7.233	7.071	101	22.040
J. Campbell	-41	5146	-0.797	6.941	75	68.613
Nimmo Holdings	125	3422	3.653	6.571	97	35.278
J. Kelly & Sons	14	2766	0.506	6.795	31	89.226
Industry Totals	2063	356297	0.579	1.275	4742	75.136

SLAUGHTERERS & MEAT PROCESSORS (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Campbell's Prime Meat	LTH	526	0.043	545	0.045	0.088	448
J. Chapman	LNK	655	0.173	1067	0.281	0.454	1014
Euroscot Meat	LTH	820	0.027	638	0.021	0.048	543
Forfar Meat Traders	ANGUS	42	0.040	23	0.022	0.062	20
W. Forrest & Son	LNK	1263	0.132	9884	1.032	1.164	3303
J.W. Galloway	GW	2108	0.086	2237	0.091	0.176	2417
Grants of Dornoch	HLAND	467	0.081	442	0.076	0.157	392
David A. Hall	LTH	6851	0.243	7693	0.273	0.516	7630
Inverclyde Meats	GW	-	-	-	-	-	-
J. McIntosh & Co.	ABD	763	0.045	1337	0.079	0.124	1373
A. McKechnie & Co.	GW	-	-	-	-	-	-
McKellar Watt	GW	2201	0.202	7468	0.687	0.890	7315
Maxco Foods	LTH	-	-	-	-	-	-
Sandyford Foods	AYR	496	0.141	642	0.183	0.324	667
Scotbeef	GW	1466	0.069	97	0.005	0.074	1640
Stewart Brothers	GW	1223	0.184	464	0.070	0.253	722
W. Bosoworth & Sons	LTH	96	0.196	37	0.076	0.272	52
British Beef Co.	BDS	10934	0.079	7799	0.056	0.135	4850
R.Y. Henderson & Sons	LTH	-	-	392	0.331	-	118
McIntosh Donald	-	-	-	-	-	-	-
Calder Millerfied	GW	547	0.246	630	0.283	0.529	240
J. Campbell	-	-	-	-	-	-	-
Nimmo Holdings	AYR	429	0.125	563	0.165	0.290	412
J. Kelly & Sons	LNK	220	0.080	795	0.287	0.367	374
Industry Totals		31107	0.122	42753	0.214	0.329	33530

SLAUGHTERERS & MEAT PROCESSORS (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Campbell's Prime Meat	5.398	1996	1899	1.051	2.2	51.0	0.0
J. Chapman	8.048	507	454	1.117	0.0	0.0	-
Euroscot Meat	3.879	130	35	3.714	1.7	-	5.6
Forfar Meat Traders	3.333	208	205	1.015	-	-	-
W. Forrest & Son	23.593	7495	914	8.200	0.1	16.9	-
J.W. Galloway	7.193	2237	2417	0.926	0.8	126.5	8.9
Grants of Dornoch	4.455	985	935	1.053	1.3	60.4	0.0
David A. Hall	8.422	3765	3702	1.017	0.4	-	-
Inverclyde Meats	-	-	-	-	-	-	-
J. McIntosh & Co.	14.924	1690	1726	0.979	1.2	126.9	0.1
A. McKechnie & Co.	-	-	-	-	-	-	-
McKellar Watt	19.986	3545	3392	1.045	0.8	23.2	-
Maxco Foods	-	-	-	-	-	-	-
Sandyford Foods	10.106	514	539	0.954	0.2	10.5	0.0
Scotbeef	8.410	2047	3590	0.570	-	78.7	10.4
Stewart Brothers	2.447	613	871	0.704	0.4	24.2	0.0
W. Bosoworth & Sons	3.467	693	708	0.979	-	-	-
British Beef Co.	3.804	25099	22150	1.133	-	-	-
R.Y. Henderson & Sons	3.688	419	145	2.890	-	-	-
McIntosh Donald	-	-	-	-	-	-	-
Calder Millerfied	2.376	531	131	4.053	-	-	-
J. Campbell	-	-	-	-	-	-	-
Nimmo Holdings	4.247	867	716	1.211	-	-	-
J. Kelly & Sons	12.065	598	177	3.379	0.1	0.0	-
Industry Totals	7.886	51098	42113	1.894	0.8	47.1	3.1

SLAUGHTERERS & MEAT PROCESSORS (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Campbell's Prime Meat	107	13211	0.810	9.074	80	165.138
J. Chapman	100	3793	2.636	-0.026	123	30.837
Euroscot Meat	255	32764	0.778	8.804	145	225.959
Forfar Meat Traders	-35	1175	-2.979	12.548	6	195.833
W. Forrest & Son	1361	13010	10.461	35.875	115	113.130
J.W. Galloway	88	25714	0.342	4.355	303	84.865
Grants of Dornoch	17	6166	0.276	6.623	80	77.075
David A. Hall	207	30746	0.673	9.032	925	33.239
Inverclyde Meats	48	2350	2.043	11.958	34	69.118
J. McIntosh & Co.	-93	28893	-0.322	70.793	142	203.472
A. McKechnie & Co.	10	2022	0.495	7.154	13	155.538
McKellar Watt	846	15784	5.360	45.207	422	37.403
Maxco Foods	78	1969	3.961	-9.513	88	22.375
Sandyford Foods	231	3283	7.036	-6.653	63	52.111
Scotbeef	183	23643	0.774	11.766	214	110.481
Stewart Brothers	6	8433	0.071	26.660	330	25.555
W. Bosoworth & Sons	-5	513	-0.975	4.908	15	34.200
British Beef Co.	-1085	168392	-0.644	21.649	1454	115.813
R.Y. Henderson & Sons	36	1148	3.136	-2.959	35	32.800
McIntosh Donald	107	27521	0.389	24.518	169	162.846
Calder Millerfied	163	2301	7.084	3.369	106	21.708
J. Campbell	50	5239	0.954	1.807	78	67.167
Nimmo Holdings	145	5093	2.847	48.831	92	55.359
J. Kelly & Sons	20	3299	0.606	19.270	33	99.970
Industry Totals	2840	426462	0.666	19.693	5065	84.198

SLAUGHTERERS & MEAT PROCESSORS (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Campbell's Prime Meat	LTH	606	0.046	599	0.045	0.091	472
J. Chapman	LNK	671	0.177	1020	0.269	0.446	1001
Euroscot Meat	LTH	-	-	-	-	-	-
Forfar Meat Traders	ANGUS	-	-	-	-	-	-
W. Forrest & Son	LNK	1181	0.091	9290	0.714	0.805	3458
J.W. Galloway	GW	2095	0.081	2308	0.090	0.171	2268
Grants of Dornoch	HLAND	478	0.078	400	0.065	0.142	384
David A. Hall	LTH	7226	0.235	7529	0.245	0.480	7852
Inverclyde Meats	GW	-	-	-	-	-	-
J. McIntosh & Co.	ABD	850	0.029	2546	0.088	0.118	4247
A. McKechnie & Co.	GW	-	-	-	-	-	-
McKellar Watt	GW	2435	0.154	7537	0.478	0.632	7416
Maxco Foods	LTH	-	-	-	-	-	-
Sandyford Foods	AYR	494	0.150	765	0.233	0.383	682
Scotbeef	GW	1612	0.068	262	0.011	0.079	1623
Stewart Brothers	GW	1545	0.183	452	0.054	0.237	749
W. Bosoworth & Sons	LTH	94	0.183	30	0.058	0.242	47
British Beef Co.	BDS	11780	0.070	7626	0.045	0.115	4475
R.Y. Henderson & Sons	LTH	-	-	420	0.366	-	145
McIntosh Donald	-	-	-	-	-	-	-
Calder Millerfied	GW	536	0.233	767	0.333	0.566	313
J. Campbell	-	-	-	-	-	-	-
Nimmo Holdings	AYR	459	0.090	612	0.120	0.210	437
J. Kelly & Sons	LNK	285	0.086	801	0.243	0.329	384
Industry Totals		32348	0.122	42964	0.203	0.315	35953

SLAUGHTERERS & MEAT PROCESSORS (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Campbell's Prime Meat	5.900	2088	1961	1.065	2.0	56.4	0.0
J. Chapman	8.138	561	542	1.035	0.0	0.0	-
Euroscot Meat	-	-	-	-	-	-	-
Forfar Meat Traders	-	-	-	-	-	-	-
W. Forrest & Son	30.070	7233	1401	5.163	0.2	12.5	-
J.W. Galloway	7.485	4148	4108	1.010	1.3	71.1	10.9
Grants of Dornoch	4.800	955	939	1.017	1.4	77.6	0.0
David A. Hall	8.489	4063	4386	0.926	0.4	-	-
Inverclyde Meats	-	-	-	-	-	-	-
J. McIntosh & Co.	29.908	6490	8191	0.792	2.0	135.4	6.5
A. McKechnie & Co.	-	-	-	-	-	-	-
McKellar Watt	17.573	4606	4485	1.027	0.7	23.4	-
Maxco Foods	-	-	-	-	-	-	-
Sandyford Foods	10.825	568	485	1.171	0.5	18.4	0.0
Scotbeef	7.584	3975	5336	0.745	-	54.3	11.9
Stewart Brothers	2.270	674	971	0.694	0.7	37.5	0.0
W. Bosoworth & Sons	3.133	490	507	0.966	-	-	-
British Beef Co.	3.078	21434	18283	1.172	-	-	-
R.Y. Henderson & Sons	4.143	521	246	2.118	-	-	-
McIntosh Donald	-	-	-	-	-	-	-
Calder Millerfied	2.953	583	129	4.519	-	-	-
J. Campbell	-	-	-	-	-	-	-
Nimmo Holdings	4.750	952	777	1.225	-	-	-
J. Kelly & Sons	11.636	571	154	3.708	0.1	-	-
Industry Totals	9.573	50030	48997	1.668	0.8	48.7	4.2

SLAUGHTERERS & MEAT PROCESSORS (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Campbell's Prime Meat	158	14098	1.121	6.714	90	156.644
J. Chapman	174	4035	4.312	6.380	124	32.540
Euroscot Meat	312	34896	0.894	6.507	156	223.692
Forfar Meat Traders	18	1381	1.303	17.532	6	230.167
W. Forrest & Son	1791	9652	18.556	-25.811	109	88.550
J.W. Galloway	-139	24143	-0.576	-6.110	254	95.051
Grants of Dornoch	101	5871	1.720	-4.784	67	87.627
David A. Hall	1608	33129	4.854	7.751	1012	32.736
Inverclyde Meats	23	2205	1.043	-6.170	32	68.906
J. McIntosh & Co.	-294	54350	-0.541	88.108	286	190.035
A. McKechnie & Co.	21	2045	1.027	1.137	14	146.071
McKellar Watt	1395	18778	7.429	18.969	575	32.657
Maxco Foods	125	2311	5.409	17.369	97	23.825
Sandyford Foods	347	3459	10.032	5.361	66	52.409
Scotbeef	-191	24486	-0.780	3.566	214	114.421
Stewart Brothers	145	10217	1.419	21.155	355	28.780
W. Bosoworth & Sons	22	555	3.964	8.187	17	32.647
British Beef Co.	-1531	140959	-1.086	-16.291	910	154.900
R.Y. Henderson & Sons	32	1250	2.560	8.885	35	35.714
McIntosh Donald	-51	64379	-0.079	133.927	252	255.472
Calder Millerfied	170	2892	5.878	25.684	111	26.054
J. Campbell	36	5558	0.648	6.089	74	75.108
Nimmo Holdings	-36	5434	-0.662	6.695	87	62.460
J. Kelly & Sons	96	3774	2.544	14.398	31	121.742
Industry Totals	4332	469857	0.922	10.176	4974	94.463

SLAUGHTERERS & MEAT PROCESSORS (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Campbell's Prime Meat	LTH	452	0.032	533	0.038	0.070	465
J. Chapman	LNK	691	0.171	1071	0.265	0.437	1032
Euroscot Meat	LTH	-	-	-	-	-	-
Forfar Meat Traders	ANGUS	-	-	-	-	-	-
W. Forrest & Son	LNK	1405	0.146	9677	1.003	1.148	4552
J.W. Galloway	GW	1933	0.080	2376	0.098	0.178	2277
Grants of Dornoch	HLAND	504	0.086	460	0.078	0.164	390
David A. Hall	LTH	6219	0.188	7942	0.240	0.427	7855
Inverclyde Meats	GW	-	-	-	-	-	-
J. McIntosh & Co.	ABD	694	0.013	1679	0.031	0.044	2041
A. McKechnie & Co.	GW	-	-	-	-	-	-
McKellar Watt	GW	2756	0.147	6257	0.333	0.480	6619
Maxco Foods	LTH	-	-	-	-	-	-
Sandyford Foods	AYR	463	0.134	633	0.183	0.317	675
Scotbeef	GW	1749	0.071	482	0.020	0.091	1611
Stewart Brothers	GW	1100	0.108	355	0.035	0.142	714
W. Bosoworth & Sons	LTH	98	0.177	48	0.086	0.263	45
British Beef Co.	BDS	7656	0.054	6188	0.044	0.098	3840
R.Y. Henderson & Sons	LTH	-	-	566	0.453	-	178
McIntosh Donald	-	-	-	-	-	-	-
Calder Millerfied	GW	-	-	-	-	-	-
J. Campbell	-	-	-	-	-	-	-
Nimmo Holdings	AYR	600	0.110	614	0.113	0.223	484
J. Kelly & Sons	LNK	246	0.065	874	0.232	0.297	423
Industry Totals		26566	0.105	39756	0.203	0.292	33201

SLAUGHTERERS & MEAT PROCESSORS (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Campbell's Prime Meat	5.167	1688	1619	1.042	-	-	-
J. Chapman	8.323	544	505	1.077	-	-	-
Euroscot Meat	-	-	-	-	-	-	-
Forfar Meat Traders	-	-	-	-	-	-	-
W. Forrest & Son	41.761	6616	1434	4.613	-	-	-
J.W. Galloway	8.965	2202	2103	1.047	-	-	-
Grants of Dornoch	5.821	935	865	1.081	-	-	-
David A. Hall	7.761	3845	3757	1.023	-	-	-
Inverclyde Meats	-	-	-	-	-	-	-
J. McIntosh & Co.	7.137	2529	2891	0.875	-	-	-
A. McKechnie & Co.	-	-	-	-	-	-	-
McKellar Watt	11.512	3254	3616	0.900	-	-	-
Maxco Foods	-	-	-	-	-	-	-
Sandyford Foods	10.227	617	659	0.937	-	-	-
Scotbeef	7.528	2169	3298	0.658	-	-	-
Stewart Brothers	2.012	569	928	0.613	-	-	-
W. Bosoworth & Sons	2.647	518	515	1.006	-	-	-
British Beef Co.	4.220	18077	15729	1.149	-	-	-
R.Y. Henderson & Sons	5.086	605	217	2.788	-	-	-
McIntosh Donald	-	-	-	-	-	-	-
Calder Millerfied	-	-	-	-	-	-	-
J. Campbell	-	-	-	-	-	-	-
Nimmo Holdings	5.563	1101	971	1.134	-	-	-
J. Kelly & Sons	13.645	593	142	4.176	-	-	-
Industry Totals	9.211	45862	39250	1.507	-	-	-

APPENDIX 14 : Steel Merchants

Firm Data (1983-88)

Contents :

Profit
Turnover
Profit-Sales Ratio (PSR %)
Annual Sales Growth (Sales %)
Number of Employees (Emp.)
Average Revenue Product (ARP)
Location Code
Wage Bill
Input-Output Ratio for Labour
Capital Employed
Input Output Ratio for Capital
Input Output Ratio (Total)
Fixed Assets (Fx. Ass.)
Fixed Assets per Employee (FA/L)
Current Assets
Current Liabilities
Current Ratio (CR)
Borrowing Ratio (Borrow)
Income Gearing (Inc. Gr.)
Export Ratio (XR)

STEEL MERCHANTS (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
Barclay & Mathieson PLC	324	5332	6.077	70	76.171
Glegg & Thomson	-45	1603	-2.807	33	48.576
Murray International Metals	417	11394	3.660	44	258.955
J. Smith & Co.	150	1800	8.333	29	62.069
Steel Stockholdings	420	10642	3.947	136	78.250
Martins	-77	9218	-0.835	121	76.182
Christie & Son	35	1356	2.581	24	56.500
Glen Metals	57	1445	3.945	11	131.364
Multi-Metals	66	3666	1.800	28	130.929
Forth Steel	-34	689	-4.935	10	68.900
Syndicated Steel	365	5796	6.297	89	65.124
Industry Totals	1678	52941	3.170	595	88.976

STEEL MERCHANTS (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Barclay & Mathieson PLC	470	7032	6.684	31.883	70	100.457
Glegg & Thomson	18	1721	1.046	7.361	31	55.516
Murray International Metals	920	20904	4.401	83.465	58	360.414
J. Smith & Co.	122	1890	6.455	5.000	29	65.172
Steel Stockholdings	549	12803	4.288	20.306	111	115.342
Martins	417	10274	4.059	11.456	121	84.909
Christie & Son	99	2145	4.615	58.186	30	71.500
Glen Metals	34	1345	2.528	-6.920	11	122.273
Multi-Metals	87	4270	2.037	16.476	29	147.241
Forth Steel	-6	643	-0.933	-6.676	10	64.300
Syndicated Steel	447	8197	5.453	41.425	106	77.330
Industry Totals	3157	71224	4.432	34.535	606	117.531

STEEL MERCHANTS (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Barclay & Mathieson PLC	GW	382	0.072	1013	0.190	0.262	390
Glegg & Thomson	ABD	200	0.125	231	0.144	0.269	41
Murray International Metals	LTH	485	0.043	3978	0.349	0.392	2711
J. Smith & Co.	ABD	138	0.077	1026	0.570	0.647	275
Steel Stockholdings	LNK	944	0.089	3806	0.358	0.446	853
Martins	LNK	978	0.106	5192	0.563	0.669	5060
Christie & Son	-	-	-	-	-	-	-
Glen Metals	LNK	-	-	-	-	-	-
Multi-Metals	LNK	-	-	-	-	-	-
Forth Steel	LTH	-	-	-	-	-	-
Syndicated Steel	-	-	-	-	-	-	-
Industry Totals		3127	0.085	15246	0.362	0.447	9330

STEEL MERCHANTS (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Barclay & Mathieson PLC	GW	570	0.081	1251	0.178	0.259	404
Glegg & Thomson	ABD	200	0.116	247	0.144	0.260	46
Murray International Metals	LTH	598	0.029	4733	0.226	0.255	3076
J. Smith & Co.	ABD	148	0.078	699	0.370	0.448	267
Steel Stockholdings	LNK	969	0.076	4001	0.313	0.388	783
Martins	LNK	1080	0.105	5550	0.540	0.645	4924
Christie & Son	-	-	-	-	-	-	-
Glen Metals	LNK	-	-	-	-	-	-
Multi-Metals	LNK	-	-	-	-	-	-
Forth Steel	LTH	-	-	-	-	-	-
Syndicated Steel	-	-	-	-	-	-	-
Industry Totals		3565	0.081	16481	0.295	0.376	9500

STEEL MERCHANTS (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Barclay & Mathieson PLC	5.571	2251	1628	1.383	0.3	13.6	0.0
Glegg & Thomson	1.242	660	470	1.404	1.5	-	0.0
Murray International Metals	61.614	11646	10379	1.122	2.0	62.1	28.3
J. Smith & Co.	9.483	1044	293	3.563	0.1	-	0.0
Steel Stockholdings	6.272	8895	5942	1.497	0.6	36.4	4.1
Martins	41.818	3740	3608	1.037	0.3	5.8	-
Christie & Son	-	-	-	-	-	-	-
Glen Metals	-	-	-	-	-	-	-
Multi-Metals	-	-	-	-	-	-	-
Forth Steel	-	-	-	-	-	-	-
Syndicated Steel	-	-	-	-	-	-	-
Industry Totals	21.000	28236	22320	1.668	0.8	29.5	6.5

STEEL MERCHANTS (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Barclay & Mathieson PLC	5.771	3135	2288	1.370	0.7	10.5	0.0
Glegg & Thomson	1.484	645	444	1.453	1.2	63.3	0.0
Murray International Metals	53.034	16751	15094	1.110	2.3	47.3	34.0
J. Smith & Co.	9.207	1084	652	1.663	0.1	-	0.0
Steel Stockholdings	7.054	9611	6393	1.503	0.7	22.5	6.8
Martins	40.694	4467	3841	1.163	0.3	28.2	0.0
Christie & Son	-	-	-	-	-	-	-
Glen Metals	-	-	-	-	-	-	-
Multi-Metals	-	-	-	-	-	-	-
Forth Steel	-	-	-	-	-	-	-
Syndicated Steel	-	-	-	-	-	-	-
Industry Totals	19.541	35693	28712	1.377	0.9	34.4	6.8

STEEL MERCHANTS (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Barclay & Mathieson PLC	607	8444	7.189	20.080	76	111.105
Glegg & Thomson	-13	1740	-0.747	1.104	32	54.375
Murray International Metals	865	24534	3.526	17.365	61	402.197
J. Smith & Co.	155	1970	7.868	4.233	29	67.931
Steel Stockholdings	1014	19471	5.208	52.082	137	142.124
Martins	549	11165	4.917	8.672	121	92.273
Christie & Son	132	2231	5.917	4.009	30	74.367
Glen Metals	53	1490	3.557	10.781	10	149.000
Multi-Metals	85	4005	2.122	-6.206	26	154.038
Forth Steel	31	923	3.359	43.546	18	51.278
Syndicated Steel	489	9456	5.171	15.359	111	85.189
Hyndford Steel	-2	763	-0.262	-	2	381.500
Industry Totals	3965	86192	4.600	21.015	653	131.994

STEEL MERCHANTS (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Barclay & Mathieson PLC	507	7982	6.352	-5.471	83	96.169
Glegg & Thomson	-19	1555	-1.222	-10.632	30	51.833
Murray International Metals	490	18101	2.707	-26.221	62	291.952
J. Smith & Co.	41	1609	2.548	-18.325	30	53.633
Steel Stockholdings	524	14122	3.711	-27.472	122	115.754
Martins	234	10243	2.284	-8.258	117	87.547
Christie & Son	101	2078	4.860	-6.858	31	67.032
Glen Metals	57	1399	4.074	-6.107	13	107.615
Multi-Metals	43	3215	1.337	-19.725	13	247.308
Forth Steel	11	902	1.220	-2.275	13	69.385
Syndicated Steel	457	8888	5.142	-6.007	122	72.852
Hyndford Steel	7	567	1.235	-25.688	2	283.500
Northern Steel Stocks	-3	547	-0.548	-	5	109.400
Industry Totals	2450	71208	3.441	-17.384	643	110.743

STEEL MERCHANTS (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Barclay & Mathieson PLC	GW	635	0.075	1538	0.182	0.257	533
Glegg & Thomson	ABD	217	0.125	250	0.144	0.268	73
Murray International Metals	LTH	572	0.023	6781	0.276	0.300	5303
J. Smith & Co.	ABD	157	0.080	736	0.374	0.453	278
Steel Stockholdings	LNK	1345	0.069	4568	0.235	0.304	800
Martins	LNK	1173	0.105	5632	0.504	0.609	4655
Christie & Son	-	-	-	-	-	-	-
Glen Metals	LNK	103	0.069	487	0.327	0.396	402
Multi-Metals	LNK	-	-	-	-	-	-
Forth Steel	LTH	-	-	-	-	-	-
Syndicated Steel	-	-	-	-	-	-	-
Hyndford Steel	LNK	4	0.005	164	0.215	0.220	86
Industry Totals		4206	0.069	20156	0.282	0.351	12130

STEEL MERCHANTS (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Barclay & Mathieson PLC	GW	760	0.095	1885	0.236	0.331	674
Glegg & Thomson	ABD	207	0.133	220	0.141	0.275	60
Murray International Metals	LTH	694	0.038	5729	0.317	0.355	5802
J. Smith & Co.	ABD	172	0.107	768	0.477	0.584	301
Steel Stockholdings	LNK	1012	0.072	1714	0.121	0.193	638
Martins	LNK	1135	0.111	5792	0.565	0.676	4416
Christie & Son	-	-	-	-	-	-	-
Glen Metals	LNK	110	0.079	540	0.386	0.465	442
Multi-Metals	LNK	103	0.032	121	0.038	0.070	85
Forth Steel	LTH	121	0.134	297	0.329	0.463	109
Syndicated Steel	-	-	-	-	-	-	-
Hyndford Steel	LNK	3	0.005	171	0.302	0.307	79
Northern Steel Stocks	-	-	-	-	-	-	-
Industry Totals		4317	0.081	17237	0.291	0.372	12606

STEEL MERCHANTS (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Barclay & Mathieson PLC	7.013	3674	2669	1.377	0.4	11.4	0.0
Glegg & Thomson	2.281	635	458	1.386	1.5	172.2	0.0
Murray International Metals	86.934	22307	20829	1.071	2.1	64.2	23.2
J. Smith & Co.	9.586	1097	639	1.717	0.1	-	0.0
Steel Stockholdings	5.839	8781	5013	1.752	0.4	29.9	0.3
Martins	38.471	4987	4010	1.244	0.2	53.9	0.1
Christie & Son	-	-	-	-	-	-	-
Glen Metals	40.200	450	365	1.233	-	-	-
Multi-Metals	-	-	-	-	-	-	-
Forth Steel	-	-	-	-	-	-	-
Syndicated Steel	-	-	-	-	-	-	-
Hyndford Steel	43.000	933	855	1.091	-	-	-
Industry Totals	29.166	42864	34838	1.359	0.8	66.3	3.9

STEEL MERCHANTS (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Barclay & Mathieson PLC	8.120	3173	1962	1.617	0.1	11.2	0.0
Glegg & Thomson	2.000	576	416	1.385	1.5	205.6	0.0
Murray International Metals	93.581	23413	23486	0.997	3.2	280.5	15.1
J. Smith & Co.	10.033	1041	574	1.814	0.1	-	0.0
Steel Stockholdings	5.230	8051	6975	1.154	2.6	19.6	2.1
Martins	37.744	4745	3369	1.408	0.2	43.2	0.9
Christie & Son	-	-	-	-	-	-	-
Glen Metals	34.000	310	212	1.462	-	-	-
Multi-Metals	6.538	1429	1393	1.026	-	-	-
Forth Steel	8.385	490	302	1.623	-	-	-
Syndicated Steel	-	-	-	-	-	-	-
Hyndford Steel	39.500	492	400	1.230	-	-	-
Northern Steel Stocks	-	-	-	-	-	-	-
Industry Totals	24.513	43720	39089	1.372	1.3	112.0	3.0

STEEL MERCHANTS (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Barclay & Mathieson PLC	439	8097	5.422	1.441	82	98.744
Glegg & Thomson	-11	1439	-0.764	-7.460	29	49.621
Murray International Metals	-901	25600	-3.520	41.429	102	250.980
J. Smith & Co.	65	1966	3.306	22.188	30	65.533
Steel Stockholdings	1032	16031	6.438	13.518	115	139.400
Martins	783	10496	7.460	2.470	117	89.709
Christie & Son	121	2034	5.949	-2.117	26	78.231
Glen Metals	17	1165	1.459	-16.726	12	97.083
Multi-Metals	71	3006	2.362	-6.501	15	200.400
Forth Steel	1	1157	0.086	28.271	12	96.417
Syndicated Steel	712	12455	5.717	40.133	116	107.371
Hyndford Steel	5	519	0.963	-8.466	2	259.500
Northern Steel Stocks	10	659	1.517	20.475	7	94.143
Industry Totals	2344	84624	2.770	18.841	665	127.254

STEEL MERCHANTS (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Barclay & Mathieson PLC	757	9982	7.584	23.280	85	117.435
Glegg & Thomson	35	1875	1.867	30.299	34	55.147
Murray International Metals	999	22010	4.539	-14.023	112	196.518
J. Smith & Co.	244	2167	11.260	10.224	31	69.903
Steel Stockholdings	3118	28930	10.778	80.463	225	128.578
Martins	1222	12762	9.575	21.589	118	108.153
Christie & Son	243	2755	8.820	35.447	31	88.871
Glen Metals	35	1343	2.606	15.279	12	111.917
Multi-Metals	50	1980	2.525	-34.132	19	104.211
Forth Steel	-58	594	-9.764	-48.660	14	42.429
Hyndford Steel	10	586	1.706	12.909	2	293.000
Northern Steel Stocks	15	702	2.137	6.525	8	87.750
Industry Totals	6670	85686	7.784	1.255	691	124.003

STEEL MERCHANTS (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Barclay & Mathieson PLC	GW	751	0.093	1657	0.205	0.297	549
Glegg & Thomson	ABD	192	0.133	219	0.152	0.285	65
Murray International Metals	LTH	774	0.030	4395	0.172	0.202	5672
J. Smith & Co.	ABD	170	0.086	807	0.410	0.497	292
Steel Stockholdings	LNK	-	-	-	-	-	-
Martins	LNK	1194	0.114	6504	0.620	0.733	4371
Christie & Son	-	-	-	-	-	-	-
Glen Metals	LNK	109	0.094	551	0.473	0.567	451
Multi-Metals	LNK	114	0.038	179	0.060	0.097	86
Forth Steel	LTH	106	0.092	297	0.257	0.348	118
Syndicated Steel	-	-	-	-	-	-	-
Hyndford Steel	LNK	2	0.004	176	0.339	0.343	71
Northern Steel Stocks	-	-	-	-	-	-	-
Industry Totals		3412	0.076	14785	0.299	0.374	11675

STEEL MERCHANTS (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Barclay & Mathieson PLC	GW	620	0.062	1469	0.147	0.209	510
Glegg & Thomson	ABD	203	0.108	233	0.124	0.233	57
Murray International Metals	LTH	510	0.023	2070	0.094	0.117	3068
J. Smith & Co.	ABD	157	0.072	807	0.372	0.445	283
Steel Stockholdings	LNK	-	-	-	-	-	-
Martins	LNK	1112	0.087	5734	0.449	0.536	4685
Christie & Son	-	-	-	-	-	-	-
Glen Metals	LNK	-	-	-	-	-	-
Multi-Metals	LNK	162	0.082	237	0.120	0.202	79
Forth Steel	LTH	136	0.229	266	0.448	0.677	114
Hyndford Steel	LNK	-	-	-	-	-	-
Northern Steel Stocks	-	-	-	-	-	-	-
Industry Totals		2900	0.095	10816	0.251	0.346	8796

STEEL MERCHANTS (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Barclay & Mathieson PLC	6.695	3199	2091	1.530	0.3	11.8	0.0
Glegg & Thomson	2.241	664	510	1.302	1.4	55.6	0.0
Murray International Metals	55.608	24716	25993	0.951	2.6	110.7	20.1
J. Smith & Co.	9.733	1063	548	1.940	0.1	-	0.0
Steel Stockholdings	-	-	-	-	-	-	-
Martins	37.359	4841	2708	1.788	0.2	-	0.8
Christie & Son	-	-	-	-	-	-	-
Glen Metals	37.583	431	331	1.302	-	-	-
Multi-Metals	5.733	2131	1980	1.076	-	-	-
Forth Steel	9.833	610	431	1.415	-	-	-
Syndicated Steel	-	-	-	-	-	-	-
Hyndford Steel	35.500	954	849	1.124	-	-	-
Northern Steel Stocks	-	-	-	-	-	-	-
Industry Totals	22.254	38609	35441	1.381	0.9	59.4	4.2

STEEL MERCHANTS (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Barclay & Mathieson PLC	6.000	3086	2128	1.451	-	-	-
Glegg & Thomson	1.676	636	460	1.384	-	-	-
Murray International Metals	27.393	16581	17579	0.943	-	-	-
J. Smith & Co.	9.116	1066	541	1.969	-	-	-
Steel Stockholdings	-	-	-	-	-	-	-
Martins	39.705	4556	3507	1.299	-	-	-
Christie & Son	-	-	-	-	-	-	-
Glen Metals	-	-	-	-	-	-	-
Multi-Metals	4.158	2138	1980	1.080	-	-	-
Forth Steel	8.143	839	687	1.221	-	-	-
Hyndford Steel	-	-	-	-	-	-	-
Northern Steel Stocks	-	-	-	-	-	-	-
Industry Totals	13.742	28902	26882	1.335	-	-	-

APPENDIX 15 : Textile Manufacture

Firm Data (1983-88)

Contents :

Profit
Turnover
Profit-Sales Ratio (PSR %)
Annual Sales Growth (Sales %)
Number of Employees (Emp.)
Average Revenue Product (ARP)
Location Code
Wage Bill
Input-Output Ratio for Labour
Capital Employed
Input Output Ratio for Capital
Input Output Ratio (Total)
Fixed Assets (Fx. Ass.)
Fixed Assets per Employee (FA/L)
Current Assets
Current Liabilities
Current Ratio (CR)
Borrowing Ratio (Borrow)
Income Gearing (Inc. Gr.)
Export Ratio (XR)

TEXTILE MANUFACTURE (1983)

Firms	Profit	Turnover	PSR(%)	Emp.	ARP
Dawson International PLC	20052	139044	14.421	6301	22.067
Don Brothers, Buist PLC	1219	28156	4.329	1006	27.988
William Baird PLC	10485	188081	5.575	11149	16.870
Willaim Haley & Sons	77	27718	0.278	469	59.100
G. & J. Johnston	125	2921	4.279	138	21.167
Locharron Products	30	1193	2.515	57	20.930
Scottish Textiles PLC	812	10532	7.710	426	24.723
H. & A. Scott	-250	5672	-4.408	277	20.477
Francis Webster & Sons	8	4036	0.198	271	14.893
Glen Cree	-43	637	-6.750	43	14.814
Chilton Brothers	66	3540	1.864	99	35.758
Bonar Textiles	-11	8472	-0.130	129	65.674
Moonweave	97	2375	4.084	93	25.538
John Bell	26	234	11.111	20	11.700
Lamont Holdings	2035	27982	7.273	999	28.010
Industry Totals	34728	450593	7.707	21477	20.980

TEXTILE MANUFACTURE (1984)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
Dawson International PLC	25251	179168	14.093	28.857	7066	25.356
Don Brothers, Buist PLC	2859	39226	7.289	39.317	1308	29.989
William Baird PLC	11857	213814	5.545	13.682	11456	18.664
Willaim Haley & Sons	104	29335	0.355	5.834	460	63.772
G. & J. Johnston	32	3380	0.947	15.714	130	26.000
Locharron Products	71	1554	4.569	30.260	65	23.908
Scottish Textiles PLC	1340	14440	9.280	37.106	467	30.921
H. & A. Scott	-65	7025	-0.925	23.854	278	25.270
Francis Webster & Sons	-201	4276	-4.701	5.946	226	18.920
Glen Cree	132	2539	5.199	298.587	64	39.672
Chilton Brothers	217	4841	4.483	36.751	120	40.342
Bonar Textiles	418	8492	4.922	0.236	125	67.936
Moonweave	100	2569	3.893	8.168	102	25.186
John Bell	32	226	14.159	-3.419	19	11.895
Lamont Holdings	3457	40812	8.471	45.851	1301	31.370
Industry Totals	45604	551697	8.266	22.438	23187	23.793

TEXTILE MANUFACTURE (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Dawson International PLC	FIFE	31912	0.230	93038	0.669	0.899	22606
Don Brothers, Buist PLC	ANGUS	5732	0.204	18225	0.647	0.851	10144
William Baird PLC	GW	53561	0.285	81421	0.433	0.718	24856
Willaim Haley & Sons	PTH & KIN	2573	0.093	4072	0.147	0.240	3719
G. & J. Johnston	FIFE	510	0.175	453	0.155	0.330	16
Locharron Products	BDS	195	0.163	1037	0.869	1.033	33
Scottish Textiles PLC	LTH	2273	0.216	7035	0.668	0.884	2078
H. & A. Scott	PTH & KIN	1730	0.305	1505	0.265	0.570	2001
Francis Webster & Sons	ANGUS	1144	0.283	2139	0.530	0.813	784
Glen Cree	BDS	176	0.276	227	0.356	0.633	164
Chilton Brothers	AYR	548	0.155	948	0.268	0.423	907
Bonar Textiles	PTH & KIN	811	0.096	1426	0.168	0.264	710
Moonweave	-	-	-	-	-	-	-
John Bell	ABD	-	-	-	-	-	-
Lamont Holdings	LTH	5096	0.182	14649	0.524	0.706	10222
Industry Totals		106261	0.205	226175	0.438	0.643	78240

TEXTILE MANUFACTURE (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Dawson International PLC	FIFE	41372	0.231	105432	0.588	0.819	29026
Don Brothers, Buist PLC	ANGUS	7828	0.200	17445	0.445	0.644	10543
William Baird PLC	GW	59813	0.280	81421	0.381	0.661	29180
Willaim Haley & Sons	PTH & KIN	2803	0.096	4097	0.140	0.235	3906
G. & J. Johnston	FIFE	519	0.154	485	0.143	0.297	21
Locharron Products	BDS	231	0.149	1265	0.814	0.963	70
Scottish Textiles PLC	LTH	2945	0.204	7718	0.534	0.738	2112
H. & A. Scott	PTH & KIN	1890	0.269	1429	0.203	0.472	2007
Francis Webster & Sons	ANGUS	1037	0.243	2010	0.470	0.713	774
Glen Cree	BDS	350	0.138	308	0.121	0.259	162
Chilton Brothers	AYR	724	0.150	1390	0.287	0.437	1228
Bonar Textiles	PTH & KIN	840	0.099	1589	0.187	0.286	1018
Moonweave	-	-	-	-	-	-	-
John Bell	ABD	-	-	-	-	-	-
Lamont Holdings	LTH	8224	0.202	17458	0.428	0.629	12049
Industry Totals		128576	0.185	242047	0.365	0.550	92096

TEXTILE MANUFACTURE (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Cr	Borrow	Inc. Gr.	XR
Dawson International PLC	3.588	109135	38703	2.820	0.1	10.1	41.9
Don Brothers, Buist PLC	10.083	11680	3599	3.245	0.2	19.6	28.6
William Baird PLC	2.229	113976	57411	1.985	0.3	14.3	-
Willaim Haley & Sons	7.930	7492	7139	1.049	1.4	86.3	8.6
G. & J. Johnston	0.116	1210	773	1.565	0.8	13.2	8.7
Locharron Products	0.579	1049	45	23.311	3.8	0.0	40.7
Scottish Textiles PLC	4.878	6780	1823	3.719	0.0	4.1	69.5
H. & A. Scott	7.224	2121	2617	0.810	1.6	-	12.8
Francis Webster & Sons	2.893	2136	781	2.735	0.2	83.0	26.3
Glen Cree	3.814	627	564	1.112	3.0	-	47.6
Chilton Brothers	9.162	1556	1515	1.027	0.7	66.7	35.1
Bonar Textiles	5.504	5128	4412	1.162	1.7	134.4	22.7
Moonweave	-	-	-	-	-	-	-
John Bell	-	-	-	-	-	-	-
Lamont Holdings	10.232	15990	11563	1.383	0.7	21.7	27.3
Industry Totals	5.249	278880	130945	3.533	1.1	41.2	30.8

TEXTILE MANUFACTURE (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Cr	Borrow	Inc. Gr.	XR
Dawson International PLC	4.108	121245	44839	2.704	0.1	5.8	-
Don Brothers, Buist PLC	8.060	17688	10786	1.640	0.4	12.4	28.9
William Baird PLC	2.547	131139	61263	2.141	0.3	17.7	-
Willaim Haley & Sons	8.491	7311	7120	1.027	1.4	82.5	7.3
G. & J. Johnston	0.162	1338	874	1.531	1.0	50.8	22.5
Locharron Products	1.077	1289	94	13.713	3.9	0.0	49.8
Scottish Textiles PLC	4.522	8799	3193	2.756	0.1	1.4	74.4
H. & A. Scott	7.219	2291	2869	0.799	1.6	189.0	18.0
Francis Webster & Sons	3.425	2346	1110	2.114	0.4	-	24.9
Glen Cree	2.531	2075	1929	1.076	5.0	29.4	85.4
Chilton Brothers	10.233	1954	1792	1.090	1.3	37.8	24.9
Bonar Textiles	8.144	4503	3932	1.145	0.8	0.2	17.2
Moonweave	-	-	-	-	-	-	-
John Bell	-	-	-	-	-	-	-
Lamont Holdings	9.261	18774	13365	1.405	0.5	14.1	31.2
Industry Totals	5.368	320752	153166	2.549	1.3	36.8	35.0

TEXTILE MANUFACTURE (1985)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
Dawson International PLC	35123	265633	13.222	48.259	9112	29.152
Don Brothers, Buist PLC	4559	51577	8.839	31.487	1501	34.362
William Baird PLC	14551	244024	5.963	14.129	12263	19.899
Willaim Haley & Sons	386	29354	1.315	0.065	457	64.232
G. & J. Johnston	9	3533	0.255	4.527	130	27.177
Locharron Products	65	2073	3.136	33.398	77	26.922
Scottish Textiles PLC	1930	18514	10.425	28.213	507	36.517
H. & A. Scott	23	6892	0.334	-1.893	280	24.614
Francis Webster & Sons	256	5679	4.508	32.811	263	21.593
Glen Cree	86	2424	3.548	-4.529	71	34.141
Chilton Brothers	67	5617	1.193	16.030	126	44.579
Bonar Textiles	432	11055	3.908	30.181	130	85.038
Moonweave	145	2818	5.145	9.692	110	25.618
John Bell	35	220	15.909	-2.655	19	11.579
Lamont Holdings	4616	46583	9.909	14.140	1237	37.658
Industry Totals	62283	695996	8.949	26.155	26283	26.481

TEXTILE MANUFACTURE (1986)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
Dawson International PLC	42129	285194	14.772	7.364	9655	29.538
Don Brothers, Buist PLC	4012	54201	7.402	5.088	1565	34.633
William Baird PLC	15237	269325	5.657	10.368	12754	21.117
Willaim Haley & Sons	158	27611	0.572	-5.938	452	61.086
G. & J. Johnston	84	3656	2.298	3.481	120	30.467
Locharron Products	332	3447	9.632	66.281	180	19.150
Scottish Textiles PLC	1241	14689	8.448	-20.660	474	30.989
H. & A. Scott	47	7651	0.614	11.013	284	26.940
Francis Webster & Sons	-370	5526	-6.696	-2.694	244	22.648
Glen Cree	105	2712	3.872	11.881	77	35.221
Chilton Brothers	253	7626	3.318	35.766	135	56.489
Bonar Textiles	525	14457	3.631	30.773	136	106.301
Moonweave	134	3096	4.328	9.865	107	28.935
John Bell	51	240	21.250	9.091	19	12.632
Lamont Holdings	5072	53908	9.409	15.725	1249	43.161
Industry Totals	69010	753339	9.161	8.239	27451	27.443

TEXTILE MANUFACTURE (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Dawson International PLC	FIFE	59409	0.224	164691	0.620	0.844	57601
Don Brothers, Buist PLC	ANGUS	9417	0.183	20070	0.389	0.572	10632
William Baird PLC	GW	67874	0.278	106810	0.438	0.716	31667
Willaim Haley & Sons	PTH & KIN	2934	0.100	4322	0.147	0.247	3413
G. & J. Johnston	FIFE	530	0.150	494	0.140	0.290	26
Locharron Products	BDS	342	0.165	1637	0.790	0.955	71
Scottish Textiles PLC	LTH	3542	0.191	8918	0.482	0.673	2700
H. & A. Scott	PTH & KIN	1956	0.284	1450	0.210	0.494	2134
Francis Webster & Sons	ANGUS	1313	0.231	2563	0.451	0.683	1219
Glen Cree	BDS	361	0.149	355	0.146	0.295	159
Chilton Brothers	AYR	972	0.173	1571	0.280	0.453	1547
Bonar Textiles	PTH & KIN	945	0.085	1863	0.169	0.254	899
Moonweave	-	-	-	-	-	-	-
John Bell	ABD	-	-	161	0.732	-	58
Lamont Holdings	LTH	8636	0.185	18500	0.397	0.583	11673
Industry Totals		158231	0.184	333405	0.385	0.543	123799

TEXTILE MANUFACTURE (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Dawson International PLC	FIFE	66212	0.232	178708	0.627	0.859	60880
Don Brothers, Buist PLC	ANGUS	10590	0.195	18955	0.350	0.545	9850
William Baird PLC	GW	-	-	-	-	-	-
Willaim Haley & Sons	PTH & KIN	3020	0.109	5267	0.191	0.300	5271
G. & J. Johnston	FIFE		0.000		0.000	0.000	-
Locharron Products	BDS	355	0.103	1651	0.479	0.582	74
Scottish Textiles PLC	LTH	3667	0.250	9112	0.620	0.870	2339
H. & A. Scott	PTH & KIN	-	-	-	-	-	-
Francis Webster & Sons	ANGUS	1454	0.263	2214	0.401	0.664	1230
Glen Cree	BDS	-	-	-	-	-	-
Chilton Brothers	AYR	1279	0.168	2709	0.355	0.523	2481
Bonar Textiles	PTH & KIN	1235	0.085	2161	0.149	0.235	895
Moonweave	-	-	-	-	-	-	-
John Bell	ABD	-	-	160	0.667	-	57
Lamont Holdings	LTH	9099	0.169	20746	0.385	0.554	12362
Industry Totals		96911	0.157	241683	0.384	0.513	95439

TEXTILE MANUFACTURE (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Cr	Borrow	Inc. Gr.	XR
Dawson International PLC	6.321	166274	59184	2.809	0.3	11.7	-
Don Brothers, Buist PLC	7.083	19397	9959	1.948	0.2	10.2	32.4
William Baird PLC	2.582	143434	68291	2.100	0.2	17.0	-
Willaim Haley & Sons	7.468	7723	6814	1.133	0.3	58.1	9.0
G. & J. Johnston	0.200	1676	1208	1.387	1.7	85.0	21.3
Locharron Products	0.922	1691	125	13.528	4.6	0.0	48.7
Scottish Textiles PLC	5.325	9433	3215	2.934	0.0	1.2	73.5
H. & A. Scott	7.621	2434	2659	0.915	-	-	-
Francis Webster & Sons	4.635	2972	1628	1.826	0.6	27.7	32.2
Glen Cree	2.239	968	772	1.254	1.8	45.2	79.7
Chilton Brothers	12.278	2477	2453	1.010	1.9	66.5	20.6
Bonar Textiles	6.915	4692	3939	1.191	0.8	16.4	19.4
Moonweave	-	-	-	-	-	-	-
John Bell	3.053	140	37	3.784	-	-	-
Lamont Holdings	9.437	19060	12233	1.558	0.3	9.8	-
Industry Totals	5.434	382371	172517	2.670	1.1	29.1	37.4

TEXTILE MANUFACTURE (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Cr	Borrow	Inc. Gr.	XR
Dawson International PLC	6.306	187415	69587	2.693	0.2	9.8	-
Don Brothers, Buist PLC	6.294	17573	8468	2.075	0.2	9.7	32.7
William Baird PLC	-	-	-	-	-	-	-
Willaim Haley & Sons	11.662	7328	7332	0.999	1.2	79.4	5.4
G. & J. Johnston	-	-	-	-	-	-	-
Locharron Products	0.411	1812	188	9.638	4.2	0.0	46.2
Scottish Textiles PLC	4.935	9088	2315	3.926	0.0	2.0	68.2
H. & A. Scott	-	-	-	-	-	-	-
Francis Webster & Sons	5.041	2950	1966	1.501	0.8	-	27.9
Glen Cree	-	-	-	-	-	-	-
Chilton Brothers	18.378	3522	3294	1.069	2.3	52.0	16.3
Bonar Textiles	6.581	4994	3728	1.340	0.7	15.7	11.8
Moonweave	-	-	-	-	-	-	-
John Bell	3.000	147	44	3.341	-	-	-
Lamont Holdings	9.898	22456	14072	1.596	0.5	-	-
Industry Totals	7.250	257285	110994	2.818	1.1	24.1	29.8

TEXTILE MANUFACTURE (1987)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
Dawson International PLC	46670	334433	13.955	17.265	10811	30.935
Don Brothers, Buist PLC	4476	58200	7.691	7.378	1618	35.970
William Baird PLC	14937	274150	5.448	1.792	12688	21.607
Willaim Haley & Sons	372	30901	1.204	11.916	469	65.887
G. & J. Johnston	49	4179	1.173	14.305	110	37.991
Locharron Products	471	3962	11.888	14.941	168	23.583
Scottish Textiles PLC	914	15115	6.047	2.900	445	33.966
H. & A. Scott	42	8123	0.517	6.169	274	29.646
Francis Webster & Sons	117	7007	1.670	26.801	261	26.847
Glen Cree	50	2337	2.139	-13.827	76	30.750
Chilton Brothers	303	7954	3.809	4.301	159	50.025
Bonar Textiles	338	9817	3.443	-32.095	151	65.013
Moonweave	241	3449	6.988	11.402	115	29.991
John Bell	39	238	16.387	-0.833	19	12.526
Lamont Holdings	4814	59237	8.127	9.885	1288	45.991
Industry Totals	73833	819102	9.014	8.730	28652	28.588

TEXTILE MANUFACTURE (1988)

Firms	Profit	Turnover	PSR(%)	Sales (%)	Emp.	ARP
Dawson International PLC	47010	355313	13.231	6.243	10833	32.799
Don Brothers, Buist PLC	5238	63117	8.299	8.448	1699	37.149
William Baird PLC	14366	275643	5.212	0.545	13114	21.019
Willaim Haley & Sons	285	4984	5.718	-83.871	103	48.388
G. & J. Johnston	84	3656	2.298	-12.515	120	30.467
Locharron Products	549	5291	10.376	33.544	186	28.446
Scottish Textiles PLC	1610	19444	8.280	28.640	470	41.370
H. & A. Scott	55	7984	0.689	-1.711	273	29.245
Francis Webster & Sons	12	5022	0.239	-28.329	263	19.095
Glen Cree	84	2226	3.774	-4.750	74	30.081
Chilton Brothers	326	9540	3.417	19.940	181	52.707
Bonar Textiles	376	11206	3.355	14.149	154	72.766
Moonweave	103	3358	3.067	-2.638	125	26.864
John Bell	52	283	18.375	18.908	19	14.895
Lamont Holdings	4456	60007	7.426	1.300	1249	48.044
Industry Totals	74606	827074	9.020	0.973	28863	28.655

TEXTILE MANUFACTURE (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Dawson International PLC	FIFE	-	-	218953	0.655	-	79946
Don Brothers, Buist PLC	ANGUS	9726	0.167	25931	0.446	0.613	15124
William Baird PLC	GW	-	-	-	-	-	-
Willaim Haley & Sons	PTH & KIN	3245	0.105	5743	0.186	0.291	6066
G. & J. Johnston	FIFE	-	-	-	-	-	-
Locharron Products	BDS	372	0.094	1919	0.484	0.578	87
Scottish Textiles PLC	LTH	3980	0.263	8642	0.572	0.835	2650
H. & A. Scott	PTH & KIN	-	-	-	-	-	-
Francis Webster & Sons	ANGUS	1465	0.209	2298	0.328	0.537	1268
Glen Cree	BDS	-	-	-	-	-	-
Chilton Brothers	AYR	1412	0.178	2625	0.330	0.508	2496
Bonar Textiles	PTH & KIN	1218	0.124	2180	0.222	0.346	844
Moonweave	-	-	-	-	-	-	-
John Bell	ABD	-	-	142	0.597	-	61
Lamont Holdings	LTH	-	-	-	-	-	-
Industry Totals		21418	0.163	268433	0.424	0.530	108542

TEXTILE MANUFACTURE (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Dawson International PLC	FIFE	49726	0.140	152164	0.428	0.568	50012
Don Brothers, Buist PLC	ANGUS	8659	0.137	20125	0.319	0.456	11259
William Baird PLC	GW	-	-	-	-	-	-
Willaim Haley & Sons	PTH & KIN	2915	0.585	4700	0.943	1.528	4475
G. & J. Johnston	FIFE	520	0.142	477	0.131	0.273	21
Locharron Products	BDS	299	0.057	1502	0.284	0.340	67
Scottish Textiles PLC	LTH	3281	0.169	8285	0.426	0.595	2376
H. & A. Scott	PTH & KIN	-	-	-	-	-	-
Francis Webster & Sons	ANGUS	1283	0.255	2245	0.447	0.702	1055
Glen Cree	BDS	-	-	-	-	-	-
Chilton Brothers	AYR	1778	0.186	4502	0.472	0.658	2631
Bonar Textiles	PTH & KIN	1010	0.090	1844	0.165	0.255	873
Moonweave	-	-	-	-	-	-	-
John Bell	ABD	-	-	-	-	-	-
Lamont Holdings	LTH	-	-	-	-	-	-
Industry Totals		69470	0.196	195845	0.402	0.597	72768

TEXTILE MANUFACTURE (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Cr	Borrow	Inc. Gr.	XR
Dawson International PLC	7.395	211569	72562	2.916	0.3	10.1	-
Don Brothers, Buist PLC	9.347	17651	6844	2.579	0.1	5.0	40.1
William Baird PLC	-	-	-	-	-	-	-
Willaim Haley & Sons	12.934	7407	7730	0.958	1.0	70.7	7.7
G. & J. Johnston	-	-	-	-	-	-	-
Locharron Products	0.518	1934	214	9.037	3.8	0.0	48.9
Scottish Textiles PLC	5.955	9237	3245	2.847	0.0	1.5	69.6
H. & A. Scott	-	-	-	-	-	-	-
Francis Webster & Sons	4.858	3691	2661	1.387	0.7	-	30.8
Glen Cree	-	-	-	-	-	-	-
Chilton Brothers	15.698	3279	3150	1.041	1.4	50.2	17.0
Bonar Textiles	5.589	5148	3812	1.350	0.7	-	-
Moonweave	-	-	-	-	-	-	-
John Bell	3.211	118	37	3.189	-	-	-
Lamont Holdings	-	-	-	-	-	-	-
Industry Totals	7.278	260034	100255	2.812	1.0	22.9	35.7

TEXTILE MANUFACTURE (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	Cr	Borrow	Inc. Gr.	XR
Dawson International PLC	4.617	159128	56975	2.793	-	-	-
Don Brothers, Buist PLC	6.627	16798	7931	2.118	-	-	-
William Baird PLC	-	-	-	-	-	-	-
Willaim Haley & Sons	43.447	7452	7227	1.031	-	-	-
G. & J. Johnston	0.175	1408	952	1.480	-	-	-
Locharron Products	0.360	1555	133	11.674	-	-	-
Scottish Textiles PLC	5.055	8667	2758	3.142	-	-	-
H. & A. Scott	-	-	-	-	-	-	-
Francis Webster & Sons	4.011	2819	1629	1.730	-	-	-
Glen Cree	-	-	-	-	-	-	-
Chilton Brothers	14.536	5393	3522	1.531	-	-	-
Bonar Textiles	5.670	4893	3965	1.234	-	-	-
Moonweave	-	-	-	-	-	-	-
John Bell	-	-	-	-	-	-	-
Lamont Holdings	-	-	-	-	-	-	-
Industry Totals	9.389	208113	85092	2.970	-	-	-

APPENDIX 16 : Timber Merchants

Firm Data (1983-88)

Contents :

Profit
Turnover
Profit-Sales Ratio (PSR %)
Annual Sales Growth (Sales %)
Number of Employees (Emp.)
Average Revenue Product (ARP)
Location Code
Wage Bill
Input-Output Ratio for Labour
Capital Employed
Input Output Ratio for Capital
Input Output Ratio (Total)
Fixed Assets (Fx. Ass.)
Fixed Assets per Employee (FA/L)
Current Assets
Current Liabilities
Current Ratio (CR)
Borrowing Ratio (Borrow)
Income Gearing (Inc. Gr.)
Export Ratio (XR)

TIMBER MERCHANTS (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
Alexanders Sawmills	44	2625	1.676	95	27.632
J. Baird & Co.	9	1801	0.500	50	36.020
D.W. Beattie & Co.	491	2790	17.599	33	84.545
Bell & Sime	99	5941	1.666	137	43.365
Brownlee PLC	1521	28589	5.320	554	51.605
A. & R. Brownlie	1005	13352	7.527	334	39.976
J. Cordiner & Son	120	2060	5.825	138	14.928
J. Donaldson & Son	107	7091	1.509	148	47.912
Elgin City Sawmills	137	6805	2.013	126	54.008
J. Fleming & Co.	90	24381	0.369	491	49.656
G. & R.	113	4441	2.544	128	34.695
Gilmour & Aitkin	178	2560	6.953	25	102.400
Hay & Co.	545	6265	8.699	124	50.524
J. Jones & Sons	327	9086	3.599	372	24.425
W. Lang	112	4921	2.276	82	60.012
Montague L. Meyer	189	4449	4.248	30	148.300
A. Morton	30	1692	1.773	49	34.531
R.L. Robertson & Co.	175	2075	8.434	45	46.111
Robinson Dunn & Co.	192	8501	2.259	165	51.521
Thomson T-Line PLC	-145	1801	-8.051	53	33.981
Velux Co.	2112	12213	17.293	41	297.878
A. Wilson & Sons	460	5993	7.676	230	26.057
J. Woyka & Co.	211	5643	3.739	108	52.250
M. Wright & Nephew	52	1378	3.774	38	36.263
Kelvin Timber	-8	1388	-0.576	45	30.844
May & Hassell	-4	1555	-0.257	34	45.735
J. McGowan & Sons	-1	39	-2.564	2	19.500
W. & P. Murray	-32	1456	-2.198	21	69.333
M. & N. Norman	42	1285	3.268	10	128.500
Rowan Timber Supplies	55	2869	1.917	13	220.692
Walker Timber	293	8663	3.382	189	45.836
J.B. Fraser & Co.	68	3163	2.150	59	53.610
S.C. Thomson	-3	48	-6.250	2	24.000
W.F. Harris & Son	101	1212	8.333	9	134.667
Industry Totals	8685	188131	4.616	3980	47.269

TIMBER MERCHANTS (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Alexanders Sawmills	AYR	433	0.165	1124	0.428	0.593	859
J. Baird & Co.	FLK	252	0.140	1622	0.901	1.041	442
D.W. Beattie & Co.	LTH	203	0.073	1264	0.453	0.526	315
Bell & Sime	PTH & KIN	755	0.127	777	0.131	0.258	43
Brownlee PLC	GW	3137	0.110	12311	0.431	0.540	5792
A. & R. Brownlie	BDS	2124	0.159	5114	0.383	0.542	3269
J. Cordiner & Son	FLK	606	0.294	1063	0.516	0.810	894
J. Donaldson & Son	FIFE	744	0.105	1584	0.223	0.328	1077
Elgin City Sawmills	MORAY	954	0.140	975	0.143	0.283	702
J. Fleming & Co.	ABD	2859	0.117	9143	0.375	0.492	5192
G. & R.	LTH	792	0.178	2434	0.548	0.726	759
Gilmour & Aitkin	GW	138	0.054	957	0.374	0.428	268
Hay & Co.	HLAND	920	0.147	2453	0.392	0.538	1082
J. Jones & Sons	STIR	1974	0.217	2982	0.328	0.545	1576
W. Lang	GW	516	0.105	886	0.180	0.285	263
Montague L. Meyer	STIR	178	0.040	659	0.148	0.188	386
A. Morton	FIFE	208	0.123	25	0.015	0.138	88
R.L. Robertson & Co.	DMF & GAL	247	0.119	717	0.346	0.465	136
Robinson Dunn & Co.	GW	1028	0.121	1019	0.120	0.241	704
Thomson T-Line PLC	FLK	269	0.149	1293	0.718	0.867	1528
Velux Co.	FIFE	332	0.027	654	0.054	0.081	544
A. Wilson & Sons	AYR	1208	0.202	4479	0.747	0.949	1963
J. Woyka & Co.	GW	629	0.111	2296	0.407	0.518	938
M. Wright & Nephew	AYR	196	0.142	525	0.381	0.523	34
Kelvin Timber	GW	-	-	-	-	-	-
May & Hassell	GW	-	-	-	-	-	-
J. McGowan & Sons	GW	-	-	-	-	-	-
W. & P. Murray	LNK	-	-	-	-	-	-
M. & N. Norman	GW	-	-	-	-	-	-
Rowan Timber Supplies	-	-	-	-	-	-	-
Walker Timber	LTH	1303	0.150	1715	0.198	0.348	759
J.B. Fraser & Co.	FLK	-	-	-	-	-	-
S.C. Thomson	GW	-	-	-	-	-	-
W.F. Harris & Son	LTH	-	-	-	-	-	-
Industry Totals		22005	0.133	58071	0.358	0.490	29613

TIMBER MERCHANTS (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Alexanders Sawmills	9.042	2160	1895	1.140	1.5	17.0	-
J. Baird & Co.	8.840	1396	216	6.463	0.4	0.0	0.0
D.W. Beattie & Co.	9.545	1420	471	3.015	0.2	0.0	0.0
Bell & Sime	0.314	2701	1967	1.373	1.4	63.3	0.0
Brownlee PLC	10.455	12049	5530	2.179	0.2	4.2	-
A. & R. Brownlie	9.787	5216	3371	1.547	0.4	5.6	1.2
J. Cordiner & Son	6.478	694	525	1.322	0.1	0.8	-
J. Donaldson & Son	7.277	2451	1944	1.261	0.8	62.5	-
Elgin City Sawmills	5.571	3080	2807	1.097	1.1	56.8	-
J. Fleming & Co.	10.574	10781	6830	1.578	0.6	23.1	0.0
G. & R.	5.930	3490	1815	1.923	0.4	32.2	-
Gilmour & Aitkin	10.720	1830	1141	1.604	0.7	32.8	-
Hay & Co.	8.726	2809	1438	1.953	0.4	0.0	0.0
J. Jones & Sons	4.237	4778	3372	1.417	0.6	32.0	-
W. Lang	3.207	1787	1164	1.535	0.6	36.0	0.0
Montague L. Meyer	12.867	1630	1357	1.201	0.9	33.7	0.0
A. Morton	1.796	561	624	0.899	53.1	53.1	-
R.L. Robertson & Co.	3.022	927	346	2.679	0.3	0.0	-
Robinson Dunn & Co.	4.267	4252	3937	1.080	17.9	27.0	0.0
Thomson T-Line PLC	28.830	1037	1272	0.815	1.0	-	-
Velux Co.	13.268	3855	3311	1.164	2.5	0.0	-
A. Wilson & Sons	8.535	3311	795	4.165	0.1	3.4	-
J. Woyka & Co.	8.685	3686	2328	1.583	0.6	41.4	4.0
M. Wright & Nephew	0.895	1210	719	1.683	1.2	-	-
Kelvin Timber	-	-	-	-	-	-	-
May & Hassell	-	-	-	-	-	-	-
J. McGowan & Sons	-	-	-	-	-	-	-
W. & P. Murray	-	-	-	-	-	-	-
M. & N. Norman	-	-	-	-	-	-	-
Rowan Timber Supplies	-	-	-	-	-	-	-
Walker Timber	4.016	3822	2866	1.334	2.6	35.7	-
J.B. Fraser & Co.	-	-	-	-	-	-	-
S.C. Thomson	-	-	-	-	-	-	-
W.F. Harris & Son	-	-	-	-	-	-	-
Industry Totals	7.875	61207	41962	1.840	3.6	24.4	0.5

TIMBER MERCHANTS (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Alexanders Sawmills	143	3575	4.000	36.190	97	36.856
J. Baird & Co.	-33	2086	-1.582	15.825	50	41.720
D.W. Beattie & Co.	330	2959	11.152	6.057	36	82.194
Bell & Sime	48	5826	0.824	-1.936	134	43.478
Brownlee PLC	2642	34095	7.749	19.259	569	59.921
A. & R. Brownlie	1172	16479	7.112	23.420	342	48.184
J. Cordiner & Son	68	2060	3.301	0.000	123	16.748
J. Donaldson & Son	275	7893	3.484	11.310	131	60.252
Elgin City Sawmills	2	8542	0.023	25.525	165	51.770
J. Fleming & Co.	3480	32515	10.703	33.362	600	54.192
G. & R.	348	5441	6.396	22.517	127	42.843
Gilmour & Aitkin	242	3133	7.724	22.383	30	104.433
Hay & Co.	113	6265	1.804	0.000	122	51.352
J. Jones & Sons	100	9668	1.034	6.405	375	25.781
W. Lang	192	6283	3.056	27.677	90	69.811
Montague L. Meyer	705	10403	6.777	133.828	131	79.412
A. Morton	68	2421	2.809	43.085	49	49.408
R.L. Robertson & Co.	177	2575	6.874	24.096	45	57.222
Robinson Dunn & Co.	-6	9380	-0.064	10.340	186	50.430
Thomson T-Line PLC	-209	2086	-10.019	15.825	53	39.358
Velux Co.	2102	13288	15.819	8.802	44	302.000
A. Wilson & Sons	350	6505	5.380	8.543	240	27.104
J. Woyka & Co.	348	7470	4.659	32.376	115	64.957
M. Wright & Nephew	-79	1525	-5.180	10.668	37	41.216
Kelvin Timber	14	1410	0.993	1.585	45	31.333
May & Hassell	18	2110	0.853	35.691	43	49.070
J. McGowan & Sons	1	44	2.273	12.821	2	22.000
W. & P. Murray	-2	1992	-0.100	36.813	22	90.545
M. & N. Norman	49	1410	3.475	9.728	10	141.000
Rowan Timber Supplies	40	3002	1.332	4.636	12	250.167
Walker Timber	322	9339	3.448	7.803	193	48.389
J.B. Fraser & Co.	76	3054	2.489	-3.446	50	61.080
S.C. Thomson	4	59	6.780	22.917	2	29.500
W.F. Harris & Son	37	955	3.874	-21.205	8	119.375
Industry Totals	13137	225848	5.817	20.048	4278	52.793

TIMBER MERCHANTS (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Alexanders Sawmills	AYR	482	0.135	1435	0.401	0.536	913
J. Baird & Co.	FLK	270	0.129	1303	0.625	0.754	441
D.W. Beattie & Co.	LTH	234	0.079	1471	0.497	0.576	401
Bell & Sime	PTH & KIN	697	0.120	845	0.145	0.265	72
Brownlee PLC	GW	3528	0.103	13538	0.397	0.501	5907
A. & R. Brownlie	BDS	2441	0.148	6284	0.381	0.529	3875
J. Cordiner & Son	FLK	602	0.292	1138	0.552	0.845	952
J. Donaldson & Son	FIFE	776	0.098	1813	0.230	0.328	1347
Elgin City Sawmills	MORAY	1250	0.146	964	0.113	0.259	732
J. Fleming & Co.	ABD	3703	0.114	14572	0.448	0.562	5083
G. & R.	LTH	864	0.159	2736	0.503	0.662	803
Gilmour & Aitkin	GW	172	0.055	1192	0.380	0.435	344
Hay & Co.	HLAND	918	0.147	2794	0.446	0.592	968
J. Jones & Sons	STIR	2139	0.221	3197	0.331	0.552	1965
W. Lang	GW	641	0.102	1006	0.160	0.262	269
Montague L. Meyer	STIR	766	0.074	1975	0.190	0.263	1282
A. Morton	FIFE	227	0.094	93	0.038	0.132	98
R.L. Robertson & Co.	DMF & GAL	273	0.106	782	0.304	0.410	149
Robinson Dunn & Co.	GW	1248	0.133	1092	0.116	0.249	1102
Thomson T-Line PLC	FLK	288	0.138	1162	0.557	0.695	1527
Velux Co.	FIFE	376	0.028	751	0.057	0.085	606
A. Wilson & Sons	AYR	1269	0.195	4861	0.747	0.942	2472
J. Woyka & Co.	GW	774	0.104	2927	0.392	0.495	1265
M. Wright & Nephew	AYR	178	0.117	494	0.324	0.441	28
Kelvin Timber	GW	-	-	-1	-0.001	-	53
May & Hassell	GW	-	-	-	-	-	-
J. McGowan & Sons	GW	-	-	-	-	-	-
W. & P. Murray	LNK	-	-	-	-	-	-
M. & N. Norman	GW	-	-	-	-	-	-
Rowan Timber Supplies	-	-	-	-	-	-	-
Walker Timber	LTH	1389	0.149	2115	0.226	0.375	816
J.B. Fraser & Co.	FLK	-	-	-	-	-	-
S.C. Thomson	GW	-	-	-	-	-	-
W.F. Harris & Son	LTH	-	-	-	-	-	-
Industry Totals		25505	0.127	70539	0.329	0.470	33470

TIMBER MERCHANTS (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Alexanders Sawmills	9.412	2137	1615	1.323	1.3	8.3	-
J. Baird & Co.	8.820	1071	209	5.124	0.1	-	0.0
D.W. Beattie & Co.	11.139	1439	369	3.900	0.2	2.4	0.0
Bell & Sime	0.537	2640	1867	1.414	1.7	79.2	0.0
Brownlee PLC	10.381	12946	5315	2.436	0.1	5.2	-
A. & R. Brownlie	11.330	6396	4001	1.599	0.3	3.5	4.6
J. Cordiner & Son	7.740	694	508	1.366	0.1	4.2	-
J. Donaldson & Son	10.282	2939	2473	1.188	0.8	37.2	-
Elgin City Sawmills	4.436	3404	3172	1.073	1.6	99.2	-
J. Fleming & Co.	8.472	14035	4546	3.087	0.6	20.7	0.0
G. & R.	6.323	4029	2096	1.922	0.4	18.2	-
Gilmour & Aitkin	11.467	2211	1363	1.622	0.7	29.2	-
Hay & Co.	7.934	3154	1328	2.375	0.1	0.0	0.0
J. Jones & Sons	5.240	5188	3956	1.311	0.7	68.2	-
W. Lang	2.989	2112	1375	1.536	0.6	30.9	0.0
Montague L. Meyer	9.786	5243	4550	1.152	1.6	18.8	0.0
A. Morton	2.000	595	600	0.992	5.3	36.4	-
R.L. Robertson & Co.	3.311	1183	550	2.151	0.3	0.6	-
Robinson Dunn & Co.	5.925	4275	4285	0.998	14.9	108.2	0.0
Thomson T-Line PLC	28.811	1079	1444	0.747	1.4	-	-
Velux Co.	13.773	4006	3400	1.178	2.9	-	-
A. Wilson & Sons	10.300	3715	1326	2.802	0.1	4.0	-
J. Woyka & Co.	11.000	4066	2404	1.691	0.7	40.2	-
M. Wright & Nephew	0.757	1277	811	1.575	1.5	-	-
Kelvin Timber	1.178	570	624	0.913	-	-	-
May & Hassell	-	-	-	-	-	-	-
J. McGowan & Sons	-	-	-	-	-	-	-
W. & P. Murray	-	-	-	-	-	-	-
M. & N. Norman	-	-	-	-	-	-	-
Rowan Timber Supplies	-	-	-	-	-	-	-
Walker Timber	4.228	3793	2494	1.521	1.1	29.4	-
J.B. Fraser & Co.	-	-	-	-	-	-	-
S.C. Thomson	-	-	-	-	-	-	-
W.F. Harris & Son	-	-	-	-	-	-	-
Industry Totals	7.984	86910	52621	1.808	1.6	30.7	0.5

TIMBER MERCHANTS (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Alexanders Sawmills	145	3608	4.019	0.923	94	38.383
J. Baird & Co.	-40	1752	-2.283	-16.012	50	35.040
D.W. Beattie & Co.	236	3173	7.438	7.232	36	88.139
Bell & Sime	-142	6077	-2.337	4.308	98	62.010
Brownlee PLC	2603	34559	7.532	1.361	576	59.998
A. & R. Brownlie	720	20178	3.568	22.447	367	54.981
J. Cordiner & Son	103	2162	4.764	4.951	120	18.017
J. Donaldson & Son	147	8919	1.648	12.999	144	61.938
Elgin City Sawmills	-102	8526	-1.196	-0.187	160	53.288
J. Fleming & Co.	1114	33380	3.337	2.660	594	56.195
G. & R.	266	5629	4.726	3.455	157	35.854
Gilmour & Aitkin	99	3417	2.897	9.065	32	106.781
Hay & Co.	711	6488	10.959	3.559	122	53.180
J. Jones & Sons	797	12754	6.249	31.920	392	32.536
W. Lang	11	6047	0.182	-3.756	89	67.944
Montague L. Meyer	299	10321	2.897	-0.788	126	81.913
A. Morton	63	2581	2.441	6.609	49	52.673
R.L. Robertson & Co.	142	2648	5.363	2.835	44	60.182
Robinson Dunn & Co.	-924	11488	-8.043	22.473	197	58.315
Thomson T-Line PLC	-269	1752	-15.354	-16.012	53	33.057
Velux Co.	1639	13646	12.011	2.694	45	303.244
A. Wilson & Sons	63	5333	1.181	-18.017	225	23.702
J. Woyka & Co.	417	8369	4.983	12.035	118	70.924
M. Wright & Nephew	62	1663	3.728	9.049	39	42.641
Kelvin Timber	0	1755	0.000	24.468	51	34.412
May & Hassell	33	2189	1.508	3.744	45	48.644
J. McGowan & Sons	-1	40	-2.500	-9.091	2	20.000
W. & P. Murray	-11	1777	-0.619	-10.793	27	65.815
M. & N. Norman	43	1233	3.487	-12.553	10	123.300
Rowan Timber Supplies	34	2890	1.176	-3.731	12	240.833
Walker Timber	386	9853	3.918	5.504	186	52.973
J.B. Fraser & Co.	62	3100	2.000	1.506	51	60.784
S.C. Thomson	-5	46	-10.870	-22.034	2	23.000
W.F. Harris & Son	23	1002	2.295	4.921	8	125.250
Scotlog Sales	5	839	0.596	-	8	104.875
Industry Totals	8729	239194	3.649	5.909	4329	55.254

TIMBER MERCHANTS (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Alexanders Sawmills	AYR	463	0.128	1545	0.428	0.557	867
J. Baird & Co.	FLK	265	0.151	1263	0.721	0.872	433
D.W. Beattie & Co.	LTH	278	0.088	1612	0.508	0.596	328
Bell & Sime	PTH & KIN	655	0.108	859	0.141	0.249	215
Brownlee PLC	GW	3704	0.107	17722	0.513	0.620	7309
A. & R. Brownlie	BDS	2882	0.143	7023	0.348	0.491	4786
J. Cordiner & Son	FLK	619	0.286	1216	0.562	0.849	964
J. Donaldson & Son	FIFE	896	0.100	2335	0.262	0.362	1413
Elgin City Sawmills	MORAY	1214	0.142	850	0.100	0.242	755
J. Fleming & Co.	ABD	4174	0.125	13430	0.402	0.527	4443
G. & R.	LTH	979	0.174	2883	0.512	0.686	782
Gilmour & Aitkin	GW	202	0.059	1219	0.357	0.416	348
Hay & Co.	HLAND	915	0.141	2984	0.460	0.601	976
J. Jones & Sons	STIR	2420	0.190	3858	0.302	0.492	2210
W. Lang	GW	604	0.100	1033	0.171	0.271	380
Montague L. Meyer	STIR	786	0.076	2022	0.196	0.272	1329
A. Morton	FIFE	261	0.101	239	0.093	0.194	206
R.L. Robertson & Co.	DMF & GAL	308	0.116	820	0.310	0.426	151
Robinson Dunn & Co.	GW	1398	0.122	1014	0.088	0.210	1135
Thomson T-Line PLC	FLK	282	0.161	893	0.510	0.671	1519
Velux Co.	FIFE	437	0.032	594	0.044	0.076	658
A. Wilson & Sons	AYR	1071	0.201	4915	0.922	1.122	2535
J. Woyka & Co.	GW	828	0.099	3317	0.396	0.495	1434
M. Wright & Nephew	AYR	184	0.111	534	0.321	0.432	18
Kelvin Timber	GW	-	-	10	0.006	-	41
May & Hassell	GW	258	0.118	365	0.167	0.285	308
J. McGowan & Sons	GW	-	-	-	-	-	-
W. & P. Murray	LNK	-	-	-	-	-	-
M. & N. Norman	GW	-	-	-	-	-	-
Rowan Timber Supplies	-	-	-	-	-	-	-
Walker Timber	LTH	1445	0.147	2482	0.252	0.399	971
J B Fraser & Co.	FLK	480	0.155	1173	0.378	0.533	229
S.C. Thomson	GW	36	0.783	3	0.065	0.848	2
W.F. Harris & Son	LTH	-	-	139	0.139	-	39
Scotlog Sales	HLAND	47	0.056	197	0.235	0.291	30
Industry Totals		28091	0.149	78549	0.320	0.486	36814

TIMBER MERCHANTS (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Alexanders Sawmills	9.223	2055	1377	1.492	0.9	2.7	-
J. Baird & Co.	8.660	1130	300	3.767	0.2	-	0.0
D.W. Beattie & Co.	9.111	1699	415	4.094	0.1	5.6	0.0
Bell & Sime	2.194	2765	2121	1.304	2.1	-	0.0
Brownlee PLC	12.689	13807	5468	2.525	0.0	2.1	-
A. & R. Brownlie	13.041	8159	5960	1.369	0.7	14.7	6.6
J. Cordiner & Son	8.033	693	441	1.571	0.1	14.9	-
J. Donaldson & Son	9.813	3382	2460	1.375	1.0	60.2	-
Elgin City Sawmills	4.719	3069	2974	1.032	1.1	145.7	-
J. Fleming & Co.	7.480	14639	5652	2.590	0.7	34.9	0.0
G. & R.	4.981	4006	1905	2.103	0.3	21.9	-
Gilmour & Aitkin	10.875	2214	1343	1.649	0.9	56.8	-
Hay & Co.	8.000	3098	1317	2.352	0.4	-	0.0
J. Jones & Sons	5.638	5327	3679	1.448	0.4	27.3	-
W. Lang	4.270	1925	1272	1.513	0.8	90.3	0.0
Montague L. Meyer	10.548	4240	3547	1.195	1.2	31.1	0.0
A. Morton	4.204	766	733	1.045	1.8	42.2	-
R.L. Robertson & Co.	3.432	1033	364	2.838	0.1	1.4	-
Robinson Dunn & Co.	5.761	4812	4933	0.975	2.3	-	0.0
Thomson T-Line PLC	28.660	1133	1759	0.644	-	-	-
Velux Co.	14.622	4102	3444	1.191	12.5	1.2	-
A. Wilson & Sons	11.267	3488	1108	3.148	0.1	13.7	-
J. Woyka & Co.	12.153	5236	3353	1.562	0.8	37.2	-
M. Wright & Nephew	0.462	1296	780	1.662	1.3	-	-
Kelvin Timber	0.804	735	765	0.961	-	-	-
May & Hassell	6.844	1320	1263	1.045	-	-	-
J. McGowan & Sons	-	-	-	-	-	-	-
W. & P. Murray	-	-	-	-	-	-	-
M. & N. Norman	-	-	-	-	-	-	-
Rowan Timber Supplies	-	-	-	-	-	-	-
Walker Timber	5.220	3773	2262	1.668	0.7	25.9	-
J.B. Fraser & Co.	4.490	1659	715	2.320	-	-	-
S.C. Thomson	1.000	5	4	1.250	-	-	-
W.F. Harris & Son	4.875	373	273	1.366	-	-	-
Scotlog Sales	3.750	479	312	1.535	-	-	-
Industry Totals	7.639	94769	58086	1.761	1.3	33.1	0.7

TIMBER MERCHANTS (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Alexanders Sawmills	171	3815	4.482	5.737	94	40.585
J. Baird & Co.	-31	1857	-1.669	5.993	49	37.898
D.W. Beattie & Co.	271	3055	8.871	-3.719	35	87.286
Bell & Sime	18	5328	0.338	-12.325	92	57.913
Brownlee PLC	827	33054	2.502	-4.355	549	60.208
A. & R. Brownlie	1801	26893	6.697	33.279	401	67.065
J. Cordiner & Son	70	2209	3.169	2.174	125	17.672
J. Donaldson & Son	139	10501	1.324	17.737	165	63.642
Elgin City Sawmills	-83	8998	-0.922	5.536	147	61.211
J. Fleming & Co.	208	32786	0.634	-1.780	574	57.118
G. & R.	167	5971	2.797	6.076	156	38.276
Gilmour & Aitkin	191	4873	3.920	42.610	37	131.703
Hay & Co.	255	6112	4.172	-5.795	120	50.933
J. Jones & Sons	307	14721	2.085	15.423	392	37.554
W. Lang	78	8446	0.924	39.673	107	78.935
Montague L. Meyer	247	9876	2.501	-4.312	125	79.008
A. Morton	72	2665	2.702	3.255	48	55.521
R.L. Robertson & Co.	155	2449	6.329	-7.515	45	54.422
Robinson Dunn & Co.	-700	9344	-7.491	-18.663	189	49.439
Thomson T-Line PLC	-318	1641	-19.378	-6.336	48	34.188
Velux Co.	1540	16446	9.364	20.519	54	304.556
A. Wilson & Sons	31	7433	0.417	39.377	224	33.183
J. Woyka & Co.	-35	9075	-0.386	8.436	123	73.780
M. Wright & Nephew	80	1775	4.507	6.735	39	45.513
Kelvin Timber	-23	2152	-1.069	22.621	49	43.918
May & Hassell	47	2690	1.747	22.887	45	59.778
J. McGowan & Sons	0	47	0.000	17.500	4	11.750
W. & P. Murray	24	2018	1.189	13.562	29	69.586
M. & N. Norman	38	1355	2.804	9.895	11	123.182
Rowan Timber Supplies	58	3376	1.718	16.817	16	211.000
Walker Timber	216	9543	2.263	-3.146	195	48.938
J.B. Fraser & Co.	74	2997	2.469	-3.323	50	59.940
S.C. Thomson	-6	50	-12.000	8.696	2	25.000
W.F. Harris & Son	20	918	2.179	-8.383	8	114.750
Scotlog Sales	31	1073	2.889	27.890	14	76.643
Industry Totals	5940	255542	2.324	6.835	4361	58.597

TIMBER MERCHANTS (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Alexanders Sawmills	AYR	579	0.152	1544	0.405	0.556	887
J. Baird & Co.	FLK	273	0.147	86	0.046	0.193	425
D.W. Beattie & Co.	LTH	309	0.101	2067	0.677	0.778	348
Bell & Sime	PTH & KIN	-	-	-	-	-	-
Brownlee PLC	GW	3683	0.111	17318	0.524	0.635	9603
A. & R. Brownlie	BDS	3483	0.130	8723	0.324	0.454	5167
J. Cordiner & Son	FLK	-	-	-	-	-	-
J. Donaldson & Son	FIFE	1012	0.096	2205	0.210	0.306	1080
Elgin City Sawmills	MORAY	1309	0.145	1044	0.116	0.262	1043
J. Fleming & Co.	ABD	4376	0.133	16482	0.503	0.636	7517
G. & R.	LTH	1054	0.177	2967	0.497	0.673	943
Gilmour & Aitkin	GW	253	0.052	1382	0.284	0.336	329
Hay & Co.	HLAND	-	-	-	-	-	-
J. Jones & Sons	STIR	2674	0.182	4418	0.300	0.482	2321
W. Lang	GW	496	0.059	1005	0.119	0.178	396
Montague L. Meyer	STIR	-	-	-	-	-	-
A. Morton	FIFE	288	0.108	284	0.107	0.215	224
R.L. Robertson & Co.	DMF & GAL	322	0.131	906	0.370	0.501	201
Robinson Dunn & Co.	GW	1370	0.147	579	0.062	0.209	1121
Thomson T-Line PLC	FLK	-	-	-	-	-	-
Velux Co.	FIFE	513	0.031	510	0.031	0.062	636
A. Wilson & Sons	AYR	1442	0.194	5031	0.677	0.871	2577
J. Woyka & Co.	GW	964	0.106	3122	0.344	0.450	1592
M. Wright & Nephew	AYR	209	0.118	519	0.292	0.410	37
Kelvin Timber	GW	-	-	-2	-0.001	-	44
May & Hassell	GW	356	0.132	266	0.099	0.231	287
J. McGowan & Sons	GW	9	0.191	27	0.574	0.766	14
W. & P. Murray	LNK	176	0.087	319	0.158	0.245	108
M. & N. Norman	GW	101	0.075	276	0.204	0.278	211
Rowan Timber Supplies	-	-	-	-	-	-	-
Walker Timber	LTH	1570	0.165	2653	0.278	0.443	909
J.B. Fraser & Co.	FLK	446	0.149	1183	0.395	0.544	261
S.C. Thomson	GW	35	0.700	-1	-0.020	0.680	3
W.F. Harris & Son	LTH	-	-	200	0.218	-	41
Scotlog Sales	HLAND	145	0.135	250	0.233	0.368	40
Industry Totals		27447	0.146	75363	0.277	0.436	38365

TIMBER MERCHANTS (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Alexanders Sawmills	9.436	2163	1506	1.436	0.8	4.9	-
J. Baird & Co.	8.673	1183	1522	0.777	0.1	0.0	0.0
D.W. Beattie & Co.	9.943	2436	717	3.397	0.2	4.8	0.0
Bell & Sime	-	-	-	-	-	-	-
Brownlee PLC	17.492	12295	4580	2.684	0.1	12.6	0.0
A. & R. Brownlie	12.885	8985	5429	1.655	0.4	7.6	3.4
J. Cordiner & Son	-	-	-	-	-	-	-
J. Donaldson & Son	6.545	3282	2157	1.522	1.0	67.4	-
Elgin City Sawmills	7.095	2954	2953	1.000	1.2	141.1	-
J. Fleming & Co.	13.096	12620	3655	3.453	0.4	76.3	0.0
G. & R.	6.045	3830	1806	2.121	0.3	27.6	-
Gilmour & Aitkin	8.892	2798	1745	1.603	0.7	-	-
Hay & Co.	-	-	-	-	-	-	-
J. Jones & Sons	5.921	6636	4539	1.462	0.7	48.1	-
W. Lang	3.701	1527	918	1.663	0.6	65.0	0.0
Montague L. Meyer	-	-	-	-	-	-	-
A. Morton	4.667	866	606	1.429	1.2	55.0	-
R.L. Robertson & Co.	4.467	1135	430	2.640	0.1	3.1	-
Robinson Dunn & Co.	5.931	4380	4922	0.890	-	-	0.0
Thomson T-Line PLC	-	-	-	-	-	-	-
Velux Co.	11.778	4424	3788	1.168	15.6	1.2	-
A. Wilson & Sons	11.504	3772	1318	2.862	0.1	31.1	-
J. Woyka & Co.	12.943	4897	3367	1.454	0.9	111.4	-
M. Wright & Nephew	0.949	1321	839	1.574	1.2	-	-
Kelvin Timber	0.898	643	665	0.967	-	-	-
May & Hassell	6.378	1459	1480	0.986	-	-	-
J. McGowan & Sons	3.500	34	21	1.619	-	-	-
W. & P. Murray	3.724	703	492	1.429	-	-	-
M. & N. Norman	19.182	792	727	1.089	-	-	-
Rowan Timber Supplies	-	-	-	-	-	-	-
Walker Timber	4.662	3670	1926	1.906	0.6	37.2	-
J.B. Fraser & Co.	5.220	1704	782	2.179	-	-	-
S.C. Thomson	1.500	16	20	0.800	-	-	-
W.F. Harris & Son	5.125	296	137	2.161	-	-	-
Scotlog Sales	2.857	585	375	1.560	-	-	-
Industry Totals	7.414	85624	49677	1.706	1.4	40.8	0.5

TIMBER MERCHANTS (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Alexanders Sawmills	-29	4324	-0.671	13.342	94	46.000
J. Baird & Co.	-78	2396	-3.255	29.025	44	54.455
D.W. Beattie & Co.	536	3130	17.125	2.455	36	86.944
Bell & Sime	-3	5699	-0.053	6.963	103	55.330
Brownlee PLC	1790	33789	5.298	2.224	590	57.269
A. & R. Brownlie	638	24681	2.585	-8.225	374	65.992
J. Cordiner & Son	59	2528	2.334	14.441	137	18.453
J. Donaldson & Son	60	11312	0.530	7.723	169	66.935
Elgin City Sawmills	-59	10546	-0.559	17.204	152	69.382
J. Fleming & Co.	-731	29205	-2.503	-10.922	491	59.481
G. & R.	2	2576	0.078	-56.858	59	43.661
Gilmour & Aitkin	257	5850	4.393	20.049	39	150.000
Hay & Co.	399	6782	5.883	10.962	127	53.402
J. Jones & Sons	745	17112	4.354	16.242	385	44.447
W. Lang	73	6821	1.070	-19.240	92	74.141
Montague L. Meyer	384	11743	3.270	18.904	132	88.962
A. Morton	39	2879	1.355	8.030	44	65.432
R.L. Robertson & Co.	129	2777	4.645	13.393	47	59.085
Robinson Dunn & Co.	377	16243	2.321	73.833	226	71.872
Velux Co.	1759	20860	8.432	26.839	61	341.967
A. Wilson & Sons	6	10079	0.060	35.598	234	43.073
J. Woyka & Co.	290	10052	2.885	10.766	131	76.733
M. Wright & Nephew	90	1838	4.897	3.549	35	52.514
Kelvin Timber	-9	2244	-0.401	4.275	46	48.783
May & Hassell	-117	2484	-4.710	-7.658	54	46.000
J. McGowan & Sons	1	46	2.174	-2.128	4	11.500
W. & P. Murray	26	2155	1.206	6.789	29	74.310
M. & N. Norman	93	1679	5.539	23.911	14	119.929
Rowan Timber Supplies	69	3741	1.844	10.812	19	196.895
Walker Timber	357	10402	3.432	9.001	205	50.741
J.B. Fraser & Co.	103	3115	3.307	3.937	50	62.300
S.C. Thomson	-1	66	-1.515	32.000	2	33.000
W.F. Harris & Son	34	957	3.553	4.248	8	119.625
Scotlog Sales	83	1976	4.200	84.157	18	109.778
Industry Totals	7372	272087	2.709	6.474	4251	64.005

TIMBER MERCHANTS (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Alexanders Sawmills	AYR	634	0.147	1524	0.352	0.499	843
J. Baird & Co.	FLK	259	0.108	104	0.043	0.151	431
D.W. Beattie & Co.	LTH	305	0.097	2396	0.765	0.863	402
Bell & Sime	PTH & KIN	-	-	-	-	-	-
Brownlee PLC	GW	518	0.015	12808	0.379	0.394	5902
A. & R. Brownlie	BDS	3654	0.148	9228	0.374	0.522	5292
J. Cordiner & Son	FLK	-	-	-	-	-	-
J. Donaldson & Son	FIFE	1174	0.104	2185	0.193	0.297	1268
Elgin City Sawmills	MORAY	1290	0.122	2168	0.206	0.328	782
J. Fleming & Co.	ABD	3813	0.131	14454	0.495	0.625	7374
G. & R.	LTH	1121	0.435	3542	1.375	1.810	1003
Gilmour & Aitkin	GW	306	0.052	1539	0.263	0.315	327
Hay & Co.	HLAND	-	-	-	-	-	-
J. Jones & Sons	STIR	2786	0.163	5007	0.293	0.455	2441
W. Lang	GW	530	0.078	2200	0.323	0.400	375
Montague L. Meyer	STIR	-	-	-	-	-	-
A. Morton	FIFE	333	0.116	397	0.138	0.254	233
R.L. Robertson & Co.	DMF & GAL	349	0.126	998	0.359	0.485	165
Robinson Dunn & Co.	GW	1485	0.091	1323	0.081	0.173	1193
Velux Co.	FIFE	618	0.030	534	0.026	0.055	642
A. Wilson & Sons	AYR	1574	0.156	4983	0.494	0.651	2705
J. Woyka & Co.	GW	1141	0.114	3708	0.369	0.482	1462
M. Wright & Nephew	AYR	199	0.108	578	0.314	0.423	43
Kelvin Timber	GW	-	-	-	-	-	-
May & Hassell	GW	358	0.144	-124	-0.050	0.094	277
J. McGowan & Sons	GW	6	0.130	28	0.609	0.739	15
W. & P. Murray	LNK	178	0.083	329	0.153	0.235	128
M. & N. Norman	GW	103	0.061	344	0.205	0.266	178
Rowan Timber Supplies	-	-	-	-	-	-	-
Walker Timber	LTH	1793	0.172	3011	0.289	0.462	996
J.B. Fraser & Co.	FLK	469	0.151	1014	0.326	0.476	230
S.C. Thomson	GW	44	0.667	-2	-0.030	0.636	3
W.F. Harris & Son	LTH	-	-	277	0.289	-	46
Scotlog Sales	HLAND	194	0.098	286	0.145	0.243	40
Industry Totals		25233	0.142	74839	0.314	0.457	34796

TIMBER MERCHANTS (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Alexanders Sawmills	8.968	2179	1498	1.455	0.8	7.0	-
J. Baird & Co.	9.795	1062	1389	0.765	0.1	-	0.0
D.W. Beattie & Co.	11.167	2641	647	4.082	0.1	3.7	0.0
Bell & Sime	-	-	-	-	-	-	-
Brownlee PLC	10.003	13442	6536	2.057	0.1	16.3	-
A. & R. Brownlie	14.150	10047	6111	1.644	0.3	11.4	5.7
J. Cordiner & Son	-	-	-	-	-	-	-
J. Donaldson & Son	7.503	4243	3326	1.276	1.6	84.5	-
Elgin City Sawmills	5.145	4888	3502	1.396	1.0	119.2	-
J. Fleming & Co.	15.018	12354	5274	2.342	0.4	55.5	0.0
G. & R.	17.000	4272	1733	2.465	0.2	-	-
Gilmour & Aitkin	8.385	3160	1948	1.622	0.8	-	-
Hay & Co.	-	-	-	-	-	-	-
J. Jones & Sons	6.340	6948	4382	1.586	0.6	44.6	-
W. Lang	4.076	3194	1369	2.333	0.6	-	0.0
Montague L. Meyer	-	-	-	-	-	-	-
A. Morton	5.295	1044	880	1.186	-	49.9	-
R.L. Robertson & Co.	3.511	1277	444	2.876	0.1	2.2	-
Robinson Dunn & Co.	5.279	4952	4822	1.027	-	-	0.0
Velux Co.	10.525	3951	4059	0.973	-	1.3	-
A. Wilson & Sons	11.560	3956	1678	2.358	0.2	62.5	-
J. Woyka & Co.	11.160	5056	2810	1.799	0.9	50.0	-
M. Wright & Nephew	1.229	1471	936	1.572	1.1	-	-
Kelvin Timber	-	-	-	-	-	-	-
May & Hassell	5.130	1328	1729	0.768	-	-	-
J. McGowan & Sons	3.750	31	18	1.722	-	-	-
W. & P. Murray	4.414	723	522	1.385	-	-	-
M. & N. Norman	12.714	911	666	1.368	-	-	-
Rowan Timber Supplies	-	-	-	-	-	-	-
Walker Timber	4.859	3972	1957	2.030	0.5	16.8	
J.B. Fraser & Co.	4.600	1435	651	2.204	-	-	-
S.C. Thomson	1.500	15	20	0.750	-	-	-
W.F. Harris & Son	5.750	529	298	1.775	-	-	-
Scotlog Sales	2.222	817	571	1.431	-	-	-
Industry Totals	7.537	94016	56242	1.723	0.6	37.5	1.0

TIMBER MERCHANTS (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Alexanders Sawmills	73	5132	1.422	18.686	95	54.021
J. Baird & Co.	18	1309	1.375	-45.367	40	32.725
D.W. Beattie & Co.	947	3776	25.079	20.639	36	104.889
Bell & Sime	9	6672	0.135	17.073	102	65.412
Brownlee PLC	1643	34298	4.790	1.506	586	58.529
A. & R. Brownlie	811	25129	3.227	1.815	351	71.593
J. Cordiner & Son	141	2745	5.137	8.584	113	24.292
J. Donaldson & Son	369	13269	2.781	17.300	165	80.418
Elgin City Sawmills	130	13353	0.974	26.617	126	105.976
J. Fleming & Co.	-1822	30556	-5.963	4.626	421	72.580
G. & R.	138	5482	2.517	112.811	84	65.262
Gilmour & Aitkin	137	5032	2.723	-13.983	43	117.023
Hay & Co.	672	7182	9.357	5.898	111	64.703
J. Jones & Sons	821	18958	4.331	10.788	366	51.798
W. Lang	944	22235	4.246	225.979	216	102.940
Montague L. Meyer	552	14346	3.848	22.166	122	117.590
A. Morton	58	2745	2.113	-4.654	49	56.020
R.L. Robertson & Co.	162	2432	6.661	-12.423	50	48.640
Robinson Dunn & Co.	354	18543	1.909	14.160	224	82.781
Velux Co.	4499	27289	16.486	30.820	63	433.159
A. Wilson & Sons	333	12422	2.681	23.246	251	49.490
J. Woyka & Co.	323	11480	2.814	14.206	141	81.418
M. Wright & Nephew	24	2114	1.135	15.016	39	54.205
Kelvin Timber	25	2199	1.137	-2.005	45	48.867
May & Hassell	-202	3312	-6.099	33.333	55	60.218
J. McGowan & Sons	0	59	0.000	28.261	1	59.000
W. & P. Murray	-41	2037	-2.013	-5.476	28	72.750
M. & N. Norman	119	2000	5.950	19.119	14	142.857
Rowan Timber Supplies	86	3720	2.312	-0.561	20	186.000
Walker Timber	404	11928	3.387	14.670	216	55.222
J.B. Fraser & Co.	96	3349	2.867	7.512	55	60.891
S.C. Thomson	22	84	26.190	27.273	2	42.000
W.F. Harris & Son	159	1101	14.441	15.047	8	137.625
Scotlog Sales	77	1823	4.224	-7.743	17	107.235
Industry Totals	12081	318111	3.798	16.915	4255	74.762

TIMBER MERCHANTS (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Alexanders Sawmills	AYR	518	0.101	1434	0.280	0.380	874
J. Baird & Co.	FLK	264	0.201	876	0.669	0.870	434
D.W. Beattie & Co.	LTH	359	0.095	2870	0.760	0.855	394
Bell & Sime	PTH & KIN	-	-	-	-	-	-
Brownlee PLC	GW	2459	0.072	929	0.027	0.099	7892
A. & R. Brownlie	BDS	2917	0.116	7274	0.289	0.406	4478
J. Cordiner & Son	FLK	-	-	-	-	-	-
J. Donaldson & Son	FIFE	1254	0.095	3049	0.230	0.324	1389
Elgin City Sawmills	MORAY	1203	0.090	1200	0.090	0.180	803
J. Fleming & Co.	ABD	3672	0.120	11275	0.369	0.489	8031
G. & R.	LTH	1350	0.246	3827	0.698	0.944	845
Gilmour & Aitkin	GW	356	0.071	1628	0.324	0.394	344
Hay & Co.	HLAND	-	-	-	-	-	-
J. Jones & Sons	STIR	2399	0.127	3892	0.205	0.332	2103
W. Lang	GW	591	0.027	2469	0.111	0.138	381
Montague L. Meyer	STIR	-	-	-	-	-	-
A. Morton	FIFE	263	0.096	208	0.076	0.172	170
R.L. Robertson & Co.	DMF & GAL	300	0.123	845	0.347	0.471	160
Robinson Dunn & Co.	GW	1306	0.070	1005	0.054	0.125	1051
Velux Co.	FIFE	455	0.017	609	0.022	0.039	617
A. Wilson & Sons	AYR	1313	0.106	4854	0.391	0.496	2450
J. Woyka & Co.	GW	1316	0.115	3940	0.343	0.458	1522
M. Wright & Nephew	AYR	193	0.091	530	0.251	0.342	32
Kelvin Timber	GW	-	-	-	-	-	-
May & Hassell	GW	-	-	-	-	-	-
J. McGowan & Sons	GW	5	0.085	27	0.458	0.542	15
W. & P. Murray	LNK	187	0.092	284	0.139	0.231	157
M. & N. Norman	GW	131	0.065	423	0.212	0.277	153
Rowan Timber Supplies	-	-	-	-	-	-	-
Walker Timber	LTH	2000	0.168	3342	0.280	0.448	1115
J.B. Fraser & Co.	FLK	-	-	-	-	-	-
S.C. Thomson	GW	-	-	-	-	-	-
W.F. Harris & Son	LTH	-	-	-	-	-	-
Scotlog Sales	HLAND	-	-	-	-	-	-
Industry Totals		24811	0.104	56790	0.288	0.392	35410

TIMBER MERCHANTS (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Alexanders Sawmills	9.198	2139	1578	1.355	-	-	-
J. Baird & Co.	10.860	1168	727	1.607	-	-	-
D.W. Beattie & Co.	10.944	3241	765	4.237	-	-	-
Bell & Sime	-	-	-	-	-	-	-
Brownlee PLC	13.468	2917	9880	0.295	-	-	-
A. & R. Brownlie	12.757	7761	4974	1.560	-	-	-
J. Cordiner & Son	-	-	-	-	-	-	-
J. Donaldson & Son	8.418	3827	2167	1.766	-	-	-
Elgin City Sawmills	6.371	4413	5216	0.846	-	-	-
J. Fleming & Co.	19.076	10625	7381	1.440	-	-	-
G. & R.	10.060	6975	3993	1.747	-	-	-
Gilmour & Aitkin	8.000	3507	2223	1.578	-	-	-
Hay & Co.	-	-	-	-	-	-	-
J. Jones & Sons	5.745	5775	3986	1.449	-	-	-
W. Lang	1.764	3218	1130	2.848	-	-	-
Montague L. Meyer	-	-	-	-	-	-	-
A. Morton	3.465	766	689	1.113	-	-	-
R.L. Robertson & Co.	3.208	1111	427	2.603	-	-	-
Robinson Dunn & Co.	4.692	4534	4580	0.990	-	-	-
Velux Co.	9.797	4068	3600	1.130	-	-	-
A. Wilson & Sons	9.763	3648	1245	2.930	-	-	-
J. Woyka & Co.	10.794	5598	3180	1.760	-	-	-
M. Wright & Nephew	0.821	1315	817	1.610	-	-	-
Kelvin Timber	-	-	-	-	-	-	-
May & Hassell	-	-	-	-	-	-	-
J. McGowan & Sons	15.000	34	22	1.545	-	-	-
W. & P. Murray	5.607	728	601	1.211	-	-	-
M. & N. Norman	10.929	936	666	1.405	-	-	-
Rowan Timber Supplies	-	-	-	-	-	-	-
Walker Timber	5.162	4547	2320	1.960	-	-	-
J.B. Fraser & Co.	-	-	-	-	-	-	-
S.C. Thomson	-	-	-	-	-	-	-
W F. Harris & Son	-	-	-	-	-	-	-
Scotlog Sales	-	-	-	-	-	-	-
Industry Totals	8.517	82852	62167	1.695	-	-	-

APPENDIX 17 : Vehicle Distribution

Firm Data (1983-88)

Contents :

Profit
Turnover
Profit-Sales Ratio (PSR %)
Annual Sales Growth (Sales %)
Number of Employees (Emp.)
Average Revenue Product (ARP)
Location Code
Wage Bill
Input-Output Ratio for Labour
Capital Employed
Input Output Ratio for Capital
Input Output Ratio (Total)
Fixed Assets (Fx. Ass.)
Fixed Assets per Employee (FA/L)
Current Assets
Current Liabilities
Current Ratio (CR)
Borrowing Ratio (Borrow)
Income Gearing (Inc. Gr.)
Export Ratio (XR)

VEHICLE DISTRIBUTION (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
Aberdeen Motors	150	15831	0.948	185	85.573
Alexander Holdings	-214	52884	-0.405	533	99.220
Armour Motors	48	6011	0.799	72	83.486
George Bicket & Co.	84	5074	1.655	61	83.180
Blackburn & Price	26	1447	1.797	21	68.905
The Braedale Garage	-15	1624	-0.924	23	70.609
A. Buchan	20	3866	0.517	22	175.727
Callanders Engineering Co.	89	10538	0.845	95	110.926
Cameron Motors	133	2830	4.700	32	88.438
Clanford Motors	227	12605	1.801	161	78.292
Arnold Clark Autos	453	30787	1.471	248	124.141
J. Clark	71	3512	2.022	36	97.556
A. Clark's West End Motors	-13	15258	-0.085	170	89.753
Cochranes Garages	201	19915	1.009	106	187.877
Cordiners Garage	327	19869	1.646	170	116.876
Thomas Corrie	-5	3998	-0.125	65	61.508
County Garage Co.	-160	3795	-4.216	37	102.568
Croall, Bryson & Co.	2	7852	0.025	108	72.704
J. Dodds & Sons	28	2570	1.089	39	65.897
W. Dunnet & Co.	28	2023	1.384	38	53.237
Edina Garages	73	2144	3.405	25	85.760
J. Ferries & Co.	3	2265	0.132	46	49.239
Flear & Thomson	23	1456	1.580	8	182.000
Grassick's Garage	-23	3954	-0.582	31	127.548
The Harper Motor Co.	247	16639	1.484	159	104.648
D. Harrison	24	2256	1.064	45	50.133
Glen Henderson Motors	284	8883	3.197	90	98.700
Inveralmond Motors	59	2215	2.664	27	82.037
Laidlaw	1013	75928	1.334	705	107.699
G.C. MacAndrew & Co.	-11	2455	-0.448	53	46.321
MacHarg Rennie & Lindsay	-184	3336	-5.516	61	54.689
MacKay & Jardine	107	5004	2.138	33	151.636
Mackays Garage	33	3087	1.069	45	68.600
MacOnochies of Kilmarnock	40	14764	0.271	110	134.218
G.C. McDiarmid	-47	1974	-2.381	27	73.111
McDonald Motor Engineers	-12	1854	-0.647	28	66.214
Milngavie Motors	65	8787	0.740	101	87.000
Mogil Motors	273	24257	1.125	339	71.555
Peat Road Motors	241	5171	4.661	53	97.566
H. Prosser & Sons	190	11625	1.634	120	96.875
Queens Garage	31	2170	1.429	27	80.370
Rosefield Motors	103	7775	1.325	65	119.615
Ross Motors	6	2482	0.242	40	62.050
S.M.T.	1759	96664	1.820	1268	76.233
St. Roque's Auto Co.	2	3063	0.065	46	66.587
Industry Sub-Totals	5779	532497		5774	

Sears Motor Group	4166	194212	2.145	2201	88.238
Ian Skelly	411	22169	1.854	118	187.873
J.M. Sloan & Co.	10	3502	0.286	59	59.356
Stout Brothers	7	6695	0.105	85	78.765
Strathford Motor Co.	72	6637	1.085	58	114.431
Taggarts	-46	46235	-0.099	513	90.127
Tomkins Brothers	26	3632	0.716	45	80.711
Town & County Motors	309	28054	1.101	244	114.975
Trust Motors	64	17729	0.361	100	177.290
Watson Brothers	281	14645	1.919	163	89.847
West End Garage	57	1915	2.977	26	73.654
Wylie & Lockhead	-264	3418	-7.724	77	44.390
Wylie's	320	20999	1.524	257	81.708
J.B. Wyllie	-36	2882	-1.249	47	61.319
Abercromby Corporation	-19	2874	-0.661	56	51.321
Annandale Motors	9	974	0.924	9	108.222
Eastern Motor Co.	257	19004	1.352	186	102.172
John Martin Holdings	418	32856	1.272	317	103.647
Peoples	112	15934	0.703	142	112.211
Western Automobile Co.	203	16590	1.224	184	90.163
Forfar Motor Co.	5	2234	0.224	14	159.571
Ness Motors	49	7111	0.689	54	131.685
P.S. Nicholson	24	2678	0.896	42	63.762
Tayford Motor Co.	118	11789	1.001	98	120.296
Industry Totals	12332	1017265	1.212	10869	93.593

VEHICLE DISTRIBUTION (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Motors	ABD	989	0.062	1234	0.078	0.140	1060
Alexander Holdings	GW	2944	0.056	8469	0.160	0.216	7812
Armour Motors	GW	478	0.080	632	0.105	0.185	330
George Bicket & Co.	AYR	240	0.047	125	0.025	0.072	348
Blackburn & Price	BDS	135	0.093	135	0.093	0.187	52
The Braedale Garage	LNK	107	0.066	423	0.260	0.326	33
A. Buchan	PTH & KIN	-	-	53	0.014	-	23
Callanders Engineering Co.	GW	599	0.057	1126	0.107	0.164	1100
Cameron Motors	PTH & KIN	185	0.065	486	0.172	0.237	43
Clanford Motors	GW	974	0.077	1272	0.101	0.178	795
Arnold Clark Autos	GW	1454	0.047	5042	0.164	0.211	8962
J. Clark	ABD	-	-	435	0.124	-	1075
A. Clark's West End Motors	GW	834	0.055	1056	0.069	0.124	577
Cochranes Garages	LTH	654	0.033	1852	0.093	0.126	1077
Cordiners Garage	HLAND/ABD	1136	0.057	2907	0.146	0.203	1852
Thomas Corrie	DMF & GAL	302	0.076	1110	0.278	0.353	693
County Garage Co.	LNK	187	0.049	382	0.101	0.150	555
Croall, Bryson & Co.	BDS	460	0.059	747	0.095	0.154	395
J. Dodds & Sons	AYR	166	0.065	766	0.298	0.363	526
W. Dunnet & Co.	HLAND	123	0.061	583	0.288	0.349	182
Edina Garages	LTH	116	0.054	171	0.080	0.134	123
J. Ferries & Co.	HLAND	201	0.089	417	0.184	0.273	343
Flear & Thomson	FIFE	37	0.025	100	0.069	0.094	60
Grassick's Garage	PTH & KIN	239	0.060	596	0.151	0.211	75
The Harper Motor Co.	ABD	1244	0.075	2371	0.142	0.217	1078
D. Harrison	BDS	-	-	254	0.113	-	154
Glen Henderson Motors	AYR	636	0.072	1708	0.192	0.264	1182
Inveralmond Motors	PTH & KIN	122	0.055	395	0.178	0.233	93
Laidlaw	LNK/LTH	4324	0.057	6174	0.081	0.138	4784
G.C. MacAndrew & Co.	LTH	289	0.118	602	0.245	0.363	538
MacHarg Rennie & Lindsay	GW	295	0.088	294	0.088	0.177	147
MacKay & Jardine	LNK	153	0.031	994	0.199	0.229	11
Mackays Garage	ABD	-	-	471	0.153	-	167
MacOnochies of Kilmarnock	AYR	542	0.037	1257	0.085	0.122	895
G.C. McDiarmid	GW	159	0.081	88	0.045	0.125	158
McDonald Motor Engineers	LNK	159	0.086	55	0.030	0.115	12
Milngavie Motors	GW	478	0.054	987	0.112	0.167	1843
Mogil Motors	STIR/DMF & GAL	1642	0.068	3172	0.131	0.198	1416
Peat Road Motors	GW	327	0.063	439	0.085	0.148	97
H. Prosser & Sons	GW	677	0.058	1424	0.122	0.181	807
Queens Garage	GW	78	0.036	273	0.126	0.162	33
Rosefield Motors	AYR	245	0.032	564	0.073	0.104	1160
Ross Motors	LTH	-	-	787	0.317	-	840
S.M.T.	LTH	7029	0.073	13860	0.143	0.216	12585
St. Roque's Auto Co.	PTH & KIN	221	0.072	221	0.072	0.144	130
Industry Sub-Totals		31180		66509	0.125		56221

Sears Motor Group	LTH	13052	0.067	27215	0.140	0.207	24157
Ian Skelly	GW/LNK	1154	0.052	2900	0.131	0.183	1335
J.M. Sloan & Co.	LTH	246	0.070	458	0.131	0.201	385
Stout Brothers	PTH & KIN	529	0.079	402	0.060	0.139	455
Strathford Motor Co.	GW	372	0.056	459	0.069	0.125	489
Taggarts	FIFE/GW/LNK	2522	0.055	4746	0.103	0.157	4117
Tomkins Brothers	GW	179	0.049	248	0.068	0.118	241
Town & County Motors	ABD	1369	0.049	2117	0.075	0.124	2247
Trust Motors	LTH/GW/LNK	1269	0.072	375	0.021	0.093	543
Watson Brothers	LNK	992	0.068	2674	0.183	0.250	1561
West End Garage	PTH & KIN	109	0.057	330	0.172	0.229	65
Wylie & Lockhead	GW	405	0.118	52	0.015	0.134	59
Wylie's	GW	1751	0.083	3002	0.143	0.226	2078
J.B. Wyllie	AYR	209	0.073	234	0.081	0.154	309
Abercromby Corporation	-	-	-	-	-	-	-
Annandale Motors	LTH	-	-	-	-	-	-
Eastern Motor Co.	LTH	-	-	-	-	-	-
John Martin Holdings	LTH	-	-	-	-	-	-
Peoples	GW	-	-	-	-	-	-
Western Automobile Co.	LTH	-	-	-	-	-	-
Forfar Motor Co.	-	-	-	-	-	-	-
Ness Motors	HLAND	-	-	-	-	-	-
P.S. Nicholson	HLAND	-	-	-	-	-	-
Tayford Motor Co.	PTH & KIN	-	-	1334	0.113	-	-
Industry Totals		55338	0.064	113055	0.125	0.187	94262

VEHICLE DISTRIBUTION (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Motors	5.730	2295	2121	1.082	1.7	23.9	-
Alexander Holdings	14.657	7169	6512	1.101	1.1	141.2	-
Armour Motors	4.583	1035	733	1.412	0.7	52.9	-
George Bicket & Co.	5.705	237	225	1.053	1.3	41.8	-
Blackburn & Price	2.476	227	144	1.576	0.7	44.7	-
The Braedale Garage	1.435	613	221	2.774	0.3	-	-
A. Buchan	1.045	472	442	1.068	-	-	-
Callanders Engineering Co.	11.579	1587	1561	1.017	1.4	56.3	-
Cameron Motors	1.344	753	310	2.429	0.1	0.7	-
Clanford Motors	4.938	2138	1661	1.287	0.6	22.5	-
Arnold Clark Autos	36.137	4059	7848	0.517	1.9	68.0	-
J. Clark	29.861	559	757	0.738	-	-	-
A. Clark's West End Motors	3.394	1613	1134	1.422	0.7	176.5	-
Cochranes Garages	10.160	1924	3365	0.572	0.9	41.3	-
Cordiners Garage	10.894	2501	2303	1.086	0.6	26.8	-
Thomas Corrie	10.662	1542	1185	1.301	0.1	113.9	-
County Garage Co.	15.000	721	894	0.806	6.0	-	-
Croall, Bryson & Co.	3.657	963	611	1.576	0.9	97.8	-
J. Dodds & Sons	13.487	638	398	1.603	2.0	50.9	-
W. Dunnet & Co.	4.789	702	301	2.332	0.2	3.4	-
Edina Garages	4.920	165	117	1.410	0.2	5.2	-
J. Ferries & Co.	7.457	384	224	1.714	0.3	70.0	-
Flear & Thomson	7.500	88	48	1.833	5.3	4.2	-
Grassick's Garage	2.419	879	358	2.455	0.3	-	-
The Harper Motor Co.	6.780	3455	2162	1.598	0.6	35.2	-
D. Harrison	3.422	362	262	1.382	0.8	50.0	-
Glen Henderson Motors	13.133	1798	1272	1.414	1.4	38.5	-
Inveralmond Motors	3.444	570	268	2.127	0.0	0.0	-
Laidlaw	6.786	11255	9865	1.141	1.3	37.6	-
G.C. MacAndrew & Co.	10.151	376	312	1.205	1.1	126.2	-
MacHarg Rennie & Lindsay	2.410	493	346	1.425	0.7	-	-
MacKay & Jardine	0.333	1247	264	4.723	0.0	18.9	-
Mackays Garage	3.711	1227	923	1.329	1.6	38.9	-
MacOnochies of Kilmarnock	8.136	1468	1106	1.327	0.7	84.4	-
G.C. McDiarmid	5.852	151	221	0.683	2.1	-	-
McDonald Motor Engineers	0.429	204	161	1.267	2.3	340.0	-
Milngavie Motors	18.248	1558	2414	0.645	2.2	66.5	-
Mogil Motors	4.177	3725	2143	1.738	0.3	27.8	-
Peat Road Motors	1.830	581	245	2.371	0.2	6.9	-
H. Prosser & Sons	6.725	1797	1180	1.523	0.6	20.8	-
Queens Garage	1.222	445	205	2.171	0.1	6.1	-
Rosefield Motors	17.846	1134	1728	0.656	1.8	57.4	-
Ross Motors	21.000	277	320	0.866	1.1	85.7	-
S.M.T.	9.925	20137	18862	1.068	1.0	39.7	-
St. Roque's Auto Co.	2.826	335	244	1.373	0.6	86.7	-
Industry Sub-Totals		85859	77976				

Sears Motor Group	10.975	39017	35959	1.085	0.8	32.8	-
Ian Skelly	11.314	8588	8526	1.007	2.0	28.4	-
J.M. Sloan & Co.	6.525	848	775	1.094	2.1	86.5	-
Stout Brothers	5.353	609	662	0.920	2.5	95.2	-
Strathford Motor Co.	8.431	749	779	0.961	3.8	56.1	-
Taggarts	8.025	7782	7143	1.089	1.0	107.5	-
Tomkins Brothers	5.356	473	466	1.015	0.5	60.0	-
Town & County Motors	9.209	2523	2653	0.951	0.5	23.1	-
Trust Motors	5.430	5694	4447	1.280	-	272.2	-
Watson Brothers	9.577	3006	1893	1.588	0.4	27.8	-
West End Garage	2.500	533	268	1.989	0.5	21.9	-
Wylie & Lockhead	0.766	757	764	0.991	12.2	-	-
Wylie's	8.086	4030	3106	1.297	0.7	41.4	-
J.B. Wyllie	6.574	351	426	0.824	2.6	427.3	-
Abercromby Corporation	-	-	-	-	-	-	-
Annandale Motors	-	-	-	-	-	-	-
Eastern Motor Co.	-	-	-	-	-	-	-
John Martin Holdings	-	-	-	-	-	-	-
Peoples	-	-	-	-	-	-	-
Western Automobile Co.	-	-	-	-	-	-	-
Forfar Motor Co.	-	-	-	-	-	-	-
Ness Motors	-	-	-	-	-	-	-
P.S. Nicholson	-	-	-	-	-	-	-
Tayford Motor Co.	-	2155	1066	2.022	-	-	-
Industry Totals	7.802	162974	146909	1.405	1.4	68.4	-

VEHICLE DISTRIBUTION (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Motors	175	17729	0.987	11.989	198	89.540
Alexander Holdings	-165	56689	-0.291	7.195	492	115.222
Armour Motors	58	7542	0.769	25.470	74	101.919
George Bicket & Co.	85	5535	1.536	9.086	61	90.738
Blackburn & Price	27	1643	1.643	13.545	21	78.238
The Braedale Garage	-8	2368	-0.338	45.813	20	118.400
A. Buchan	-31	4595	-0.675	18.857	22	208.864
Callanders Engineering Co.	94	12359	0.761	17.280	92	134.337
Cameron Motors	69	3024	2.282	6.855	32	94.500
Clanford Motors	271	13570	1.997	7.656	162	83.765
Arnold Clark Autos	294	28333	1.038	-7.971	250	113.332
J. Clark	200	6810	2.937	93.907	36	189.167
A. Clark's West End Motors	310	15387	2.015	0.845	158	97.386
Cochranes Garages	209	19467	1.074	-2.250	104	187.183
Cordiners Garage	288	20688	1.392	4.122	180	114.933
Thomas Corrie	1	5248	0.019	31.266	80	65.600
County Garage Co.	-178	3777	-4.713	-0.474	37	102.081
Croall, Bryson & Co.	-27	9033	-0.299	15.041	106	85.217
J. Dodds & Sons	16	2505	0.639	-2.529	42	59.643
W. Dunnet & Co.	15	2512	0.597	24.172	40	62.800
Edina Garages	54	1942	2.781	-9.422	23	84.435
J. Fernies & Co.	16	2374	0.674	4.812	49	48.449
Flear & Thomson	41	2631	1.558	80.701	14	187.929
Grassick's Garage	34	4316	0.788	9.155	33	130.788
The Harper Motor Co.	229	17005	1.347	2.200	162	104.969
D. Harrison	37	2260	1.637	0.177	45	50.222
Glen Henderson Motors	379	9413	4.026	5.966	92	102.315
Inveralmond Motors	63	1943	3.242	-12.280	25	77.720
Laidlaw	617	76179	0.810	0.331	681	111.863
G C. MacAndrew & Co.	12	2502	0.480	1.914	51	49.059
MacHarg Rennie & Lindsay	70	3709	1.887	11.181	53	69.981
MacKay & Jardine	261	6914	3.775	38.169	33	209.515
Mackays Garage	60	3453	1.738	11.856	45	76.733
MacOnochies of Kilmarnock	4	16341	0.024	10.681	110	148.555
G C. McDiarmid	-7	1812	-0.386	-8.207	19	95.368
McDonald Motor Engineers	-51	1370	-3.723	-26.106	19	72.105
Milngavie Motors	2	8796	0.023	0.102	97	90.680
Mogil Motors	204	15097	1.351	-37.762	325	46.452
Peat Road Motors	152	5435	2.797	5.105	71	76.549
H. Prosser & Sons	209	15027	1.391	29.265	130	115.592
Queens Garage	69	3085	2.237	42.166	31	99.516
Rosefield Motors	204	12606	1.618	62.135	65	193.938
Ross Motors	87	2610	3.333	5.157	41	63.659
S.M.T.	2000	110448	1.811	14.260	1367	80.796
St. Roque's Auto Co.	50	5372	0.931	75.384	57	94.246
Industry Sub-Totals	6499	571454			5845	

Sears Motor Group	4516	220907	2.044	13.745	2378	92.896
Ian Skelly	77	20604	0.374	-7.059	116	177.621
J.M. Sloan & Co.	-144	3809	-3.781	8.766	55	69.255
Stout Brothers	16	6655	0.240	-0.597	78	85.321
Strathford Motor Co.	66	6810	0.969	2.607	60	113.500
Taggarts	71	43690	0.163	-5.504	496	88.085
Tomkins Brothers	60	4767	1.259	31.250	46	103.630
Town & County Motors	350	29963	1.168	6.805	262	114.363
Trust Motors	318	17976	1.769	1.393	90	199.733
Watson Brothers	136	14560	0.934	-0.580	157	92.739
West End Garage	44	2222	1.980	16.031	25	88.880
Wylie & Lockhead	-370	3163	-11.698	-7.461	81	39.049
Wylie's	215	20615	1.043	-1.829	249	82.791
J.B. Wyllie	-48	3225	-1.488	11.901	50	64.500
Abercromby Corporation	17	3445	0.493	19.868	61	56.475
Annandale Motors	14	1018	1.375	4.517	9	113.111
Eastern Motor Co.	244	20006	1.220	5.273	195	102.595
John Martin Holdings	499	37555	1.329	14.302	334	112.440
Peoples	127	14765	0.860	-7.337	144	102.535
Western Automobile Co.	186	16489	1.128	-0.609	170	96.994
Forfar Motor Co.	1	2176	0.046	-2.596	13	167.385
Ness Motors	32	7589	0.422	6.722	58	130.845
P.S. Nicholson	-19	2845	-0.668	6.236	43	66.163
Tayford Motor Co.	156	13009	1.199	10.349	109	119.349
Industry Totals	13063	1089317	1.199	7.083	11124	97.925

VEHICLE DISTRIBUTION (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Motors	ABD	1169	0.066	1348	0.076	0.142	1098
Alexander Holdings	GW	3179	0.056	8055	0.142	0.198	7740
Armour Motors	GW	507	0.067	669	0.089	0.156	371
George Bicket & Co.	AYR	279	0.050	428	0.077	0.128	354
Blackburn & Price	BDS	144	0.088	159	0.097	0.184	53
The Braedale Garage	LNK	100	0.042	415	0.175	0.217	33
A. Buchan	PTH & KIN	133	0.029	61	0.013	0.042	18
Callanders Engineering Co.	GW	640	0.052	1290	0.104	0.156	1038
Cameron Motors	PTH & KIN	183	0.061	549	0.182	0.242	140
Clanford Motors	GW	969	0.071	1272	0.094	0.165	1164
Arnold Clark Autos	GW	1804	0.064	6769	0.239	0.303	10382
J. Clark	ABD	261	0.038	1021	0.150	0.188	1205
A. Clark's West End Motors	GW	1235	0.080	1362	0.089	0.169	583
Cochranes Garages	LTH	817	0.042	2164	0.111	0.153	998
Cordiners Garage	HLAND/ABD	1223	0.059	2167	0.105	0.164	1963
Thomas Corrie	DMF & GAL	377	0.072	989	0.188	0.260	925
County Garage Co.	LNK	204	0.054	681	0.180	0.234	31
Croall, Bryson & Co.	BDS	492	0.054	693	0.077	0.131	383
J. Dodds & Sons	AYR	200	0.080	939	0.375	0.455	550
W. Dunnet & Co.	HLAND	152	0.061	597	0.238	0.298	188
Edina Garages	LTH	118	0.061	210	0.108	0.169	123
J. Ferries & Co.	HLAND	221	0.093	436	0.184	0.277	269
Flear & Thomson	FIFE	148	0.056	343	0.130	0.187	91
Grassick's Garage	PTH & KIN	274	0.063	660	0.153	0.216	95
The Harper Motor Co.	ABD	1115	0.066	2462	0.145	0.210	1077
D. Harrison	BDS	-	-	280	0.124	-	210
Glen Henderson Motors	AYR	745	0.079	1950	0.207	0.286	1416
Inveralmond Motors	PTH & KIN	118	0.061	437	0.225	0.286	90
Laidlaw	LNK/LTH	4457	0.059	6388	0.084	0.142	5405
G.C. MacAndrew & Co.	LTH	319	0.127	561	0.224	0.352	521
MacHarg Rennie & Lindsay	GW	335	0.090	364	0.098	0.188	149
MacKay & Jardine	LNK	173	0.025	1128	0.163	0.188	18
Mackays Garage	ABD	-	-	531	0.154	-	234
MacOnochies of Kilmarnock	AYR	658	0.040	1213	0.074	0.114	1043
G.C. McDiarmid	GW	120	0.066	91	0.050	0.116	149
McDonald Motor Engineers	LNK	123	0.090	141	0.103	0.193	42
Milngavie Motors	GW	600	0.068	988	0.112	0.181	2121
Mogil Motors	STIR/DMF & GAL	919	0.061	2042	0.135	0.196	664
Peat Road Motors	GW	366	0.067	520	0.096	0.163	300
H. Prosser & Sons	GW	886	0.059	1535	0.102	0.161	825
Queens Garage	GW	151	0.049	341	0.111	0.159	29
Rosefield Motors	AYR	255	0.020	746	0.059	0.079	1475
Ross Motors	LTH	-	-	980	0.375	-	922
S.M.T.	LTH	8049	0.073	14296	0.129	0.202	12508
St. Roque's Auto Co.	PTH & KIN	320	0.060	269	0.050	0.110	236
Industry Sub-Totals		34538		70540			59229

Sears Motor Group	LTH	14722	0.067	28131	0.127	0.194	26938
Ian Skelly	GW/LNK	1726	0.084	2778	0.135	0.219	1052
J.M. Sloan & Co.	LTH	303	0.080	354	0.093	0.172	362
Stout Brothers	PTH & KIN	471	0.071	406	0.061	0.132	352
Strathford Motor Co.	GW	403	0.059	466	0.068	0.128	545
Taggarts	FIFE/GW/LNK	2723	0.062	4852	0.111	0.173	4702
Tomkins Brothers	GW	201	0.042	303	0.064	0.106	233
Town & County Motors	ABD	1568	0.052	2366	0.079	0.131	2516
Trust Motors	LTH/GW/LNK	1289	0.072	633	0.035	0.107	581
Watson Brothers	LNK	1035	0.071	3208	0.220	0.291	1693
West End Garage	PTH & KIN	128	0.058	364	0.164	0.221	81
Wylie & Lockhead	GW	414	0.131	-387	-0.122	0.009	22
Wylie's	GW	1751	0.085	3041	0.148	0.232	1953
J.B. Wyllie	AYR	236	0.073	225	0.070	0.143	296
Abercrombie Corporation	-	-	-	-	-	-	-
Annandale Motors	LTH	-	-	-	-	-	-
Eastern Motor Co.	LTH	-	-	-	-	-	-
John Martin Holdings	LTH	-	-	-	-	-	-
Peoples	GW	-	-	-	-	-	-
Western Automobile Co.	LTH	-	-	-	-	-	-
Forfar Motor Co.	-	-	-	-	-	-	-
Ness Motors	HLAND	-	-	-	-	-	-
P.S. Nicholson	HLAND	-	-	-	-	-	-
Tayford Motor Co.	PTH & KIN	699	0.054	1396	0.107	0.161	224
Industry Totals		62207	0.065	118676	0.126	0.186	100779

VEHICLE DISTRIBUTION (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Motors	5.545	2513	2263	1.110	1.5	26.5	-
Alexander Holdings	15.732	7902	7587	1.042	1.2	126.6	-
Armour Motors	5.014	1296	1008	1.286	1.2	48.7	-
George Bicket & Co.	5.803	528	454	1.163	0.5	37.3	-
Blackburn & Price	2.524	231	125	1.848	0.5	41.3	-
The Braedale Garage	1.650	571	189	3.021	0.2	-	-
A. Buchan	0.818	421	378	1.114	4.7	263.2	-
Callanders Engineering Co.	11.283	1827	1575	1.160	1.2	55.7	0.0
Cameron Motors	4.375	762	353	2.159	0.1	1.4	-
Clanford Motors	7.185	1940	1681	1.154	0.7	15.0	-
Arnold Clark Autos	41.528	6351	9964	0.637	2.3	78.6	-
J. Clark	33.472	733	787	0.931	1.2	29.6	-
A. Clark's West End Motors	3.690	3299	2520	1.309	0.4	12.7	-
Cochranes Garages	9.596	2230	3444	0.648	0.8	37.9	-
Cordiners Garage	10.906	2780	2576	1.079	0.6	26.5	-
Thomas Corrie	11.563	885	821	1.078	0.1	96.9	0.0
County Garage Co.	0.838	662	579	1.143	4.7	-	-
Croall, Bryson & Co.	3.613	993	683	1.454	1.3	139.7	0.0
J. Dodds & Sons	13.095	560	171	3.275	1.9	48.4	-
W. Dunnet & Co.	4.700	633	224	2.826	0.2	6.3	-
Edina Garages	5.348	167	80	2.088	0.0	1.8	-
J. Ferries & Co.	5.490	389	222	1.752	0.2	-	-
Flear & Thomson	6.500	417	242	1.723	2.4	2.4	-
Grassick's Garage	2.879	860	295	2.915	0.2	2.9	0.0
The Harper Motor Co.	6.648	3412	2027	1.683	0.6	30.2	-
D. Harrison	4.667	354	284	1.246	0.8	38.3	-
Glen Henderson Motors	15.391	2159	1625	1.329	1.2	23.9	-
Inveralmond Motors	3.600	608	261	2.330	0.1	0.0	-
Laidlaw	7.937	10749	9766	1.101	1.2	50.0	0.0
G.C. MacAndrew & Co.	10.216	335	295	1.136	0.8	80.6	-
MacHarg Rennie & Lindsay	2.811	636	421	1.511	0.6	26.3	-
MacKay & Jardine	0.545	1510	400	3.775	0.0	8.1	0.0
Mackays Garage	5.200	1356	1059	1.280	1.5	26.8	-
MacOnochies of Kilmarnock	9.482	1227	1057	1.161	0.5	98.2	0.0
G.C. McDiarmid	7.842	117	175	0.669	1.9	216.7	-
McDonald Motor Engineers	2.211	240	141	1.702	0.1	-	-
Milngavie Motors	21.866	1387	2520	0.550	2.4	98.7	-
Mogil Motors	2.043	2296	1091	2.104	0.2	13.7	0.0
Peat Road Motors	4.225	540	320	1.688	0.2	17.8	0.0
H. Prosser & Sons	6.346	2332	1622	1.438	0.7	32.1	-
Queens Garage	0.935	527	215	2.451	0.1	0.0	-
Rosefield Motors	22.692	1620	2359	0.687	1.2	42.0	-
Ross Motors	22.488	382	324	1.179	0.7	13.9	-
S.M.T.	9.150	20896	19108	1.094	1.0	41.2	0.0
St. Roque's Auto Co.	4.140	453	420	1.079	0.6	28.6	-
Industry Sub-Totals		92086	83711				

Sears Motor Group	11.328	39320	38127	1.031	0.8	35.6	-
Ian Skelly	9.069	9501	9480	1.002	2.1	66.7	0.0
J.M. Sloan & Co.	6.582	916	924	0.991	4.2	-	-
Stout Brothers	4.513	602	548	1.099	2.0	88.9	0.0
Strathford Motor Co.	9.083	848	927	0.915	4.3	60.0	-
Taggarts	9.480	8154	8004	1.019	1.1	91.3	-
Tomkins Brothers	5.065	838	768	1.091	0.1	38.1	0.0
Town & County Motors	9.603	2856	3006	0.950	0.5	25.2	-
Trust Motors	6.456	4431	4839	0.916	-	66.8	0.0
Watson Brothers	10.783	2556	1041	2.455	0.1	37.6	-
West End Garage	3.240	589	306	1.925	0.6	24.1	-
Wylie & Lockhead	0.272	697	1106	0.630	-	-	-
Wylie's	7.843	3929	2841	1.383	0.3	43.6	-
J.B. Wyllie	5.920	444	515	0.862	3.1	-	-
Abercromby Corporation	-	-	-	-	-	-	-
Annandale Motors	-	-	-	-	-	-	-
Eastern Motor Co.	-	-	-	-	-	-	-
John Martin Holdings	-	-	-	-	-	-	-
Peoples	-	-	-	-	-	-	-
Western Automobile Co.	-	-	-	-	-	-	-
Forfar Motor Co.	-	-	-	-	-	-	-
Ness Motors	-	-	-	-	-	-	-
P.S. Nicholson	-	-	-	-	-	-	-
Tayford Motor Co.	2.055	1863	691	2.696	0.2	23.5	-
Industry Totals	8.081	169630	156834	1.468	1.1	48.8	0.0

VEHICLE DISTRIBUTION (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Motors	218	20489	1.064	15.568	207	98.981
Alexander Holdings	251	58453	0.429	3.112	441	132.546
Armour Motors	62	8611	0.720	14.174	75	114.813
George Bicket & Co.	93	5501	1.691	-0.614	60	91.683
Blackburn & Price	36	2135	1.686	29.945	23	92.826
The Braedale Garage	-37	2188	-1.691	-7.601	23	95.130
A. Buchan	-20	3916	-0.511	-14.777	20	195.800
Callanders Engineering Co.	405	14575	2.779	17.930	93	156.720
Cameron Motors	96	3334	2.879	10.251	34	98.059
Clanford Motors	327	14465	2.261	6.595	152	95.164
Arnold Clark Autos	350	29876	1.172	5.446	251	119.028
J. Clark	129	4994	2.583	-26.667	42	118.905
A. Clark's West End Motors	348	16986	2.049	10.392	156	108.885
Cochranes Garages	28	22587	0.124	16.027	94	240.287
Cordiners Garage	266	22017	1.208	6.424	185	119.011
Thomas Corrie	26	5432	0.479	3.506	56	97.000
County Garage Co.	-123	1436	-8.565	-61.980	13	110.462
Croall, Bryson & Co.	16	9336	0.171	3.354	101	92.436
J. Dodds & Sons	14	2526	0.554	0.838	43	58.744
W. Dunnet & Co.	13	2473	0.526	-1.553	40	61.825
Edina Garages	78	2461	3.169	26.725	24	102.542
J. Ferries & Co.	10	2621	0.382	10.404	51	51.392
Flear & Thomson	41	2859	1.434	8.666	14	204.214
Grassick's Garage	29	4423	0.656	2.479	34	130.088
The Harper Motor Co.	181	17154	1.055	0.876	160	107.213
D. Harrison	32	2135	1.499	-5.531	45	47.444
Glen Henderson Motors	274	11082	2.472	17.731	100	110.820
Inveralmond Motors	82	2196	3.734	13.021	25	87.840
Laidlaw	914	80840	1.131	6.118	651	124.178
G.C. MacAndrew & Co.	17	3023	0.562	20.823	45	67.178
MacHarg Rennie & Lindsay	99	4199	2.358	13.211	58	72.397
MacKay & Jardine	214	7181	2.980	3.862	37	194.081
Mackays Garage	122	4413	2.765	27.802	45	98.067
MacOnochies of Kilmarnock	125	15873	0.788	-2.864	121	131.182
G.C. McDiarmid	11	2023	0.544	11.645	21	96.333
McDonald Motor Engineers	13	1543	0.843	12.628	18	85.722
Milngavie Motors	49	8881	0.552	0.966	99	89.707
Mogil Motors	199	15152	1.313	0.364	321	47.202
Peat Road Motors	166	6284	2.642	15.621	110	57.127
H. Prosser & Sons	236	14325	1.647	-4.672	160	89.531
Queens Garage	61	3181	1.918	3.112	34	93.559
Rosefield Motors	101	11233	0.899	-10.892	69	162.797
Ross Motors	110	3395	3.240	30.077	44	77.159
S.M.T.	2195	120898	1.816	9.461	1400	86.356
St. Roque's Auto Co.	59	6912	0.854	28.667	60	115.200
Industry Sub-Totals	7916	605617			5855	

Sears Motor Group	5623	234473	2.398	6.141	2375	98.725
Ian Skelly	107	21856	0.490	6.076	104	210.154
J.M. Sloan & Co.	114	2312	4.931	-39.302	63	36.698
Stout Brothers	32	6370	0.502	-4.282	76	83.816
Strathford Motor Co.	9	6786	0.133	-0.352	55	123.382
Taggarts	44	52768	0.083	20.778	472	111.797
Tomkins Brothers	46	5439	0.846	14.097	45	120.867
Town & County Motors	185	32256	0.574	7.653	269	119.911
Trust Motors	403	17930	2.248	-0.256	77	232.857
Watson Brothers	70	15922	0.440	9.354	154	103.390
West End Garage	30	2736	1.096	23.132	25	109.440
Wylie & Lockhead	-49	2432	-2.015	-23.111	65	37.415
Wylie's	232	19561	1.186	-5.113	247	79.194
J.B. Wyllie	-69	2947	-2.341	-8.620	44	66.977
Abercromby Corporation	10	3223	0.310	-6.444	59	54.627
Annandale Motors	4	940	0.426	-7.662	10	94.000
Eastern Motor Co.	217	22445	0.967	12.191	202	111.114
John Martin Holdings	737	47526	1.551	26.550	395	120.319
Peoples	248	17899	1.386	21.226	163	109.810
Western Automobile Co.	215	17558	1.225	6.483	168	104.512
Forfar Motor Co.	18	2590	0.695	19.026	16	161.875
Ness Motors	39	8081	0.483	6.483	65	124.323
P.S. Nicholson	42	2044	2.055	-28.155	32	63.875
Tayford Motor Co.	148	13690	1.081	5.235	107	127.944
Industry Totals	16371	1165401	1.405	6.985	11143	104.586

VEHICLE DISTRIBUTION (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Motors	ABD	1384	0.068	1556	0.076	0.143	1108
Alexander Holdings	GW	3075	0.053	7711	0.132	0.185	7606
Armour Motors	GW	608	0.071	708	0.082	0.153	376
George Bicket & Co.	AYR	300	0.055	471	0.086	0.140	360
Blackburn & Price	BDS	142	0.067	197	0.092	0.159	60
The Braedale Garage	LNK	110	0.050	378	0.173	0.223	37
A. Buchan	PTH & KIN	131	0.033	42	0.011	0.044	17
Callanders Engineering Co.	GW	709	0.049	1694	0.116	0.165	787
Cameron Motors	PTH & KIN	230	0.069	698	0.209	0.278	308
Clanford Motors	GW	1079	0.075	1506	0.104	0.179	1152
Arnold Clark Autos	GW	2255	0.075	9641	0.323	0.398	12845
J. Clark	ABD	308	0.062	1423	0.285	0.347	1205
A. Clark's West End Motors	GW	1620	0.095	1857	0.109	0.205	816
Cochranes Garages	LTH	885	0.039	2614	0.116	0.155	775
Cordiners Garage	HLAND/ABD	3075	0.140	2285	0.104	0.243	2217
Thomas Corrie	DMF & GAL	289	0.053	812	0.149	0.203	786
County Garage Co.	LNK	83	0.058	711	0.495	0.553	26
Croall, Bryson & Co.	BDS	512	0.055	723	0.077	0.132	305
J. Dodds & Sons	AYR	218	0.086	938	0.371	0.458	514
W. Dunnet & Co.	HLAND	179	0.072	606	0.245	0.317	199
Edina Garages	LTH	157	0.064	264	0.107	0.171	124
J. Ferries & Co.	HLAND	248	0.095	441	0.168	0.263	279
Flear & Thomson	FIFE	166	0.058	383	0.134	0.192	88
Grassick's Garage	PTH & KIN	318	0.072	685	0.155	0.227	123
The Harper Motor Co.	ABD	1156	0.067	2504	0.146	0.213	1137
D. Harrison	BDS	-	-	305	0.143	-	227
Glen Henderson Motors	AYR	888	0.080	2148	0.194	0.274	1972
Inveralmond Motors	PTH & KIN	131	0.060	485	0.221	0.281	90
Laidlaw	LNK/LTH	4742	0.059	6701	0.083	0.142	5538
G.C. MacAndrew & Co.	LTH	319	0.106	543	0.180	0.285	488
MacHarg Rennie & Lindsay	GW	371	0.088	561	0.134	0.222	150
MacKay & Jardine	LNK	213	0.030	1258	0.175	0.205	46
Mackays Garage	ABD	-	-	648	0.147	-	280
MacOnochies of Kilmarnock	AYR	720	0.045	1294	0.082	0.127	1046
G.C. McDiarmid	GW	-	-	-	-	-	-
McDonald Motor Engineers	LNK	106	0.069	142	0.092	0.161	35
Milngavie Motors	GW	726	0.082	1086	0.122	0.204	2444
Mogil Motors	STIR/DMF & GAL	1102	0.073	2795	0.184	0.257	1037
Peat Road Motors	GW	562	0.089	638	0.102	0.191	323
H. Prosser & Sons	GW	1076	0.075	1507	0.105	0.180	804
Queens Garage	GW	172	0.054	397	0.125	0.179	51
Rosefield Motors	AYR	284	0.025	886	0.079	0.104	1372
Ross Motors	LTH	-	-	1116	0.329	-	1288
S.M.T.	LTH	8640	0.071	14975	0.124	0.195	13030
St. Roque's Auto Co.	PTH & KIN	402	0.058	317	0.046	0.104	238
Industry Sub-Totals		39691		78650			63709

Sears Motor Group	LTH	15937	0.068	29323	0.125	0.193	28907
Ian Skelly	GW/LNK	1638	0.075	2981	0.136	0.211	1287
J.M. Sloan & Co.	LTH	354	0.153	449	0.194	0.347	362
Stout Brothers	PTH & KIN	464	0.073	432	0.068	0.141	390
Strathford Motor Co.	GW	405	0.060	462	0.068	0.128	501
Taggarts	FIFE/GW/LNK	2806	0.053	4959	0.094	0.147	4470
Tomkins Brothers	GW	238	0.044	407	0.075	0.119	317
Town & County Motors	ABD	1809	0.056	2455	0.076	0.132	3088
Trust Motors	LTH/GW/LNK	1340	0.075	1136	0.063	0.138	579
Watson Brothers	LNK	1106	0.069	3331	0.209	0.279	1988
West End Garage	PTH & KIN	139	0.051	364	0.133	0.184	97
Wylie & Lockhead	GW	-	-	-	-	-	-
Wylie's	GW	1892	0.097	3075	0.157	0.254	2036
J.B. Wyllie	AYR	229	0.078	139	0.047	0.125	282
Abercromby Corporation	-	-	-	-	-	-	-
Annandale Motors	LTH	-	-	-	-	-	-
Eastern Motor Co.	LTH	1447	0.064	2552	0.114	0.178	1682
John Martin Holdings	LTH	2696	0.057	6692	0.141	0.198	4381
Peoples	GW	-	-	-	-	-	-
Western Automobile Co.	LTH	773	0.044	2235	0.127	0.171	1574
Forfar Motor Co.	-	-	-	-	-	-	-
Ness Motors	HLAND	333	0.041	670	0.083	0.124	344
P.S. Nicholson	HLAND	207	0.101	731	0.358	0.459	328
Tayford Motor Co.	PTH & KIN	717	0.052	1502	0.110	0.162	253
Industry Totals		74221	0.068	142545	0.145	0.209	116575

VEHICLE DISTRIBUTION (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Motors	5.353	3014	2566	1.175	1.0	28.8	-
Alexander Holdings	17.247	7148	7043	1.015	1.2	78.0	-
Armour Motors	5.013	1448	1116	1.297	1.0	55.1	-
George Bicket & Co.	6.000	541	430	1.258	0.4	52.4	-
Blackburn & Price	2.609	296	159	1.862	0.5	46.3	-
The Braedale Garage	1.609	489	148	3.304	0.2	-	-
A. Buchan	0.850	322	297	1.084	6.3	217.6	-
Callanders Engineering Co.	8.462	2093	1286	1.628	0.7	27.2	0.0
Cameron Motors	9.059	913	523	1.746	0.1	0.0	-
Clanford Motors	7.579	2257	1903	1.186	0.7	15.1	-
Arnold Clark Autos	51.175	9033	12237	0.738	5.0	71.9	-
J. Clark	28.690	986	768	1.284	1.2	46.5	-
A. Clark's West End Motors	5.231	5619	4578	1.227	2.0	31.9	0.0
Cochranes Garages	8.245	1776	3541	0.502	0.9	86.2	-
Cordiners Garage	11.984	3035	2967	1.023	0.7	35.0	-
Thomas Corrie	14.036	932	906	1.029	0.1	58.7	0.0
County Garage Co.	2.000	253	242	1.045	7.5	-	-
Croall, Bryson & Co.	3.020	1126	708	1.590	0.7	86.0	0.0
J. Dodds & Sons	11.953	596	172	3.465	1.6	12.5	-
W. Dunnet & Co.	4.975	611	204	2.995	0.2	7.1	-
Edina Garages	5.167	229	89	2.573	0.0	2.5	-
J. Ferries & Co.	5.471	448	286	1.566	0.4	47.4	-
Flear & Thomson	6.286	366	150	2.440	1.8	0.0	-
Grassick's Garage	3.618	906	344	2.634	0.1	5.4	0.0
The Harper Motor Co.	7.106	3668	2301	1.594	0.6	38.9	0.0
D. Harrison	5.044	387	309	1.252	0.9	50.0	-
Glen Henderson Motors	19.720	2729	2553	1.069	1.5	41.6	-
Inveralmond Motors	3.600	645	250	2.580	0.0	0.0	-
Laidlaw	8.507	12409	11246	1.103	1.4	48.1	0.0
G.C. MacAndrew & Co.	10.844	471	415	1.135	0.8	73.0	-
MacHarg Rennie & Lindsay	2.586	902	491	1.837	0.2	9.3	-
MacKay & Jardine	1.243	1475	263	5.608	0.0	8.2	-
Mackays Garage	6.222	1620	1252	1.294	1.3	16.4	-
MacOnochies of Kilmarnock	8.645	1310	1062	1.234	0.4	55.5	0.0
G.C. McDiarmid	-	-	-	-	-	-	-
McDonald Motor Engineers	1.944	205	98	2.092	0.0	45.8	-
Milngavie Motors	24.687	1817	3175	0.572	2.7	84.0	-
Mogil Motors	3.231	2684	1302	2.061	0.2	7.9	0.0
Peat Road Motors	2.936	732	413	1.772	0.3	22.4	0.0
H. Prosser & Sons	5.025	2796	2093	1.336	0.7	36.4	-
Queens Garage	1.500	556	210	2.648	0.2	1.6	-
Rosefield Motors	19.884	2304	2790	0.826	1.3	61.0	-
Ross Motors	29.273	459	631	0.727	1.1	22.5	-
S.M.T.	9.307	24527	22582	1.086	1.0	41.7	0.0
St. Roque's Auto Co.	3.967	518	439	1.180	0.6	33.7	-
Industry Sub-Totals		106651	96538				

Sears Motor Group	12.171	45535	45119	1.009	0.9	34.9	-
Ian Skelly	12.375	8374	8467	0.989	2.1	65.3	0.0
J.M. Sloan & Co.	5.746	962	875	1.099	2.4	21.4	-
Stout Brothers	5.132	648	606	1.069	1.9	75.8	0.0
Strathford Motor Co.	9.109	709	748	0.948	1.2	92.9	-
Taggarts	9.470	8784	8295	1.059	1.1	95.7	-
Tomkins Brothers	7.044	1136	1046	1.086	0.3	47.1	0.0
Town & County Motors	11.480	3281	3914	0.838	0.6	49.5	-
Trust Motors	7.519	5141	5081	1.012	12.2	45.5	0.0
Watson Brothers	12.909	2666	1470	1.814	0.3	51.4	-
West End Garage	3.880	601	314	1.914	0.5	42.3	-
Wylie & Lockhead	-	-	-	-	-	-	-
Wylie's	8.243	4178	3139	1.331	0.3	33.1	-
J.B. Wyllie	6.409	387	530	0.730	5.5	-	-
Abercromby Corporation	-	-	-	-	-	-	-
Annandale Motors	-	-	-	-	-	-	-
Eastern Motor Co.	8.327	3346	2476	1.351	-	-	-
John Martin Holdings	11.091	12412	10101	1.229	-	-	-
Peoples	-	-	-	-	-	-	-
Western Automobile Co.	9.369	2123	1462	1.452	-	-	-
Forfar Motor Co.	-	-	-	-	-	-	-
Ness Motors	5.292	994	668	1.488	-	-	-
P.S. Nicholson	10.250	580	177	3.277	-	-	-
Tayford Motor Co.	2.364	2197	948	2.318	0.2	18.4	-
Industry Totals	8.874	210705	191974	1.566	1.4	43.3	0.0

VEHICLE DISTRIBUTION (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Motors	-6	13544	-0.044	-33.896	145	93.407
Alexander Holdings	1009	58096	1.737	-0.611	437	132.943
Armour Motors	1	9653	0.010	12.101	79	122.190
George Bicket & Co.	114	6607	1.725	20.105	62	106.565
Blackburn & Price	50	2423	2.064	13.489	24	100.958
The Braedale Garage	-16	1877	-0.852	-14.214	20	93.850
A. Buchan	10	3612	0.277	-7.763	17	212.471
Callanders Engineering Co.	310	16255	1.907	11.527	100	162.550
Cameron Motors	210	4436	4.734	33.053	35	126.743
Clanford Motors	471	15944	2.954	10.225	151	105.589
Arnold Clark Autos	1383	76712	1.803	156.768	770	99.626
J. Clark	123	5880	2.092	17.741	43	136.744
A. Clark's West End Motors	320	37142	0.862	118.662	306	121.379
Cochranes Garages	352	13901	2.532	-38.456	109	127.532
Cordiners Garage	347	21100	1.645	-4.165	182	115.934
Thomas Corrie	152	5318	2.858	-2.099	54	98.481
County Garage Co.	28	2661	1.052	85.306	16	166.313
Croall, Bryson & Co.	-51	9038	-0.564	-3.192	96	94.146
J. Dodds & Sons	5	2318	0.216	-8.234	42	55.190
W. Dunnet & Co.	21	2771	0.758	12.050	43	64.442
Edina Garages	44	2689	1.636	9.265	24	112.042
J. Fernies & Co.	16	2997	0.534	14.346	55	54.491
Flear & Thomson	108	4300	2.512	50.402	29	148.276
Grassick's Garage	42	5344	0.786	20.823	36	148.444
The Harper Motor Co.	39	17734	0.220	3.381	177	100.192
D. Harrison	19	1652	1.150	-22.623	29	56.966
Glen Henderson Motors	342	13087	2.613	18.092	131	99.901
Inveralmond Motors	103	2449	4.206	11.521	25	97.960
Laidlaw	1094	89894	1.217	11.200	590	152.363
G.C. MacAndrew & Co.	83	4065	2.042	34.469	49	82.959
MacHarg Rennie & Lindsay	213	8515	2.501	102.786	75	113.533
MacKay & Jardine	236	8821	2.675	22.838	42	210.024
Mackays Garage	125	4657	2.684	5.529	48	97.021
MacOnochies of Kilmarnock	195	16184	1.205	1.959	121	133.752
G.C. McDiarmid	7	2011	0.348	-0.593	21	95.762
McDonald Motor Engineers	71	2656	2.673	72.132	19	139.789
Milngavie Motors	-12	11562	-0.104	30.188	100	115.620
Mogil Motors	360	13450	2.677	-11.233	319	42.163
Peat Road Motors	170	18514	0.918	194.621	191	96.932
H. Prosser & Sons	-72	16717	-0.431	16.698	157	106.478
Queens Garage	67	3099	2.162	-2.578	35	88.543
Rosefield Motors	102	11639	0.876	3.614	71	163.930
Ross Motors	97	3218	3.014	-5.214	44	73.136
S.M.T.	2415	130006	1.858	7.534	1389	93.597
St. Roque's Auto Co.	20	6460	0.310	-6.539	65	99.385
Industry Sub-Totals	10717	711008			6573	

Sears Motor Group	3876	225218	1.721	-3.947	2434	92.530
Ian Skelly	-56	23169	-0.242	6.008	98	236.418
J.M. Sloan & Co.	216	4777	4.522	106.618	74	64.554
Stout Brothers	-29	6705	-0.433	5.259	74	90.608
Strathford Motor Co.	81	5866	1.381	-13.557	51	115.020
Taggarts	256	46563	0.550	-11.759	410	113.568
Tomkins Brothers	25	6479	0.386	19.121	46	140.848
Town & County Motors	55	33020	0.167	2.369	276	119.638
Trust Motors	598	26439	2.262	47.457	94	281.266
Watson Brothers	125	14229	0.878	-10.633	117	121.615
West End Garage	38	2641	1.439	-3.472	25	105.640
Wylie & Lockhead	-11	1667	-0.660	-31.456	50	33.340
Wylie's	199	22603	0.880	15.551	243	93.016
J.B. Wyllie	-88	2314	-3.803	-21.479	27	85.704
Abercromby Corporation	29	3772	0.769	17.034	64	58.938
Annandale Motors	9	919	0.979	-2.234	10	91.900
Eastern Motor Co.	345	28053	1.230	24.986	235	119.374
John Martin Holdings	737	47526	1.551	0.000	395	120.319
Peoples	344	21237	1.620	18.649	175	121.354
Western Automobile Co.	282	20131	1.401	14.654	160	125.819
Forfar Motor Co.	22	2811	0.783	8.533	17	165.353
Ness Motors	36	8241	0.437	1.980	68	121.191
P.S. Nicholson	-53	2152	-2.463	5.284	39	55.179
Tayford Motor Co.	142	12704	1.118	-7.202	109	116.550
Industry Totals	17895	1280244	1.398	9.854	11864	107.910

VEHICLE DISTRIBUTION (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Motors	ABD	980	0.072	1067	0.079	0.151	1045
Alexander Holdings	GW	3135	0.054	8875	0.153	0.207	6704
Armour Motors	GW	669	0.069	704	0.073	0.142	401
George Bicket & Co.	AYR	355	0.054	563	0.085	0.139	421
Blackburn & Price	BDS	-	-	231	0.095	-	74
The Braedale Garage	LNK	103	0.055	272	0.145	0.200	39
A. Buchan	PTH & KIN	117	0.032	-5	-0.001	0.031	18
Callanders Engineering Co.	GW	778	0.048	1775	0.109	0.157	1230
Cameron Motors	PTH & KIN	253	0.057	632	0.142	0.200	314
Clanford Motors	GW	1132	0.071	1820	0.114	0.185	1337
Arnold Clark Autos	GW	2701	0.035	14293	0.186	0.222	20954
J. Clark	ABD	313	0.053	1406	0.239	0.292	1194
A. Clark's West End Motors	GW	2104	0.057	2103	0.057	0.113	927
Cochranes Garages	LTH	914	0.066	2572	0.185	0.251	802
Cordiners Garage	HLAND/ABD	1429	0.068	2493	0.118	0.186	1886
Thomas Corrie	DMF & GAL	319	0.060	989	0.186	0.246	611
County Garage Co.	LNK	67	0.025	0	0.000	0.025	33
Croall, Bryson & Co.	BDS	517	0.057	732	0.081	0.138	464
J. Dodds & Sons	AYR	218	0.094	896	0.387	0.481	496
W. Dunnet & Co.	HLAND	186	0.067	597	0.215	0.283	222
Edina Garages	LTH	168	0.062	291	0.108	0.171	132
J. Ferries & Co.	HLAND	268	0.089	456	0.152	0.242	289
Flear & Thomson	FIFE	173	0.040	190	0.044	0.084	88
Grassick's Garage	PTH & KIN	353	0.066	660	0.124	0.190	179
The Harper Motor Co.	ABD	1309	0.074	2488	0.140	0.214	1290
D. Harrison	BDS	-	-	-	-	-	-
Glen Henderson Motors	AYR	1057	0.081	2330	0.178	0.259	2347
Inveralmond Motors	PTH & KIN	167	0.068	349	0.143	0.211	110
Laidlaw	LNK/LTH	4673	0.052	6955	0.077	0.129	4952
G.C. MacAndrew & Co.	LTH	341	0.084	565	0.139	0.223	492
MacHarg Rennie & Lindsay	GW	498	0.058	773	0.091	0.149	260
MacKay & Jardine	LNK	251	0.028	1401	0.159	0.187	68
Mackays Garage	ABD	-	-	-	-	-	-
MacOnochies of Kilmarnock	AYR	756	0.047	1414	0.087	0.134	1103
G.C. McDiarmid	GW	-	-	-	-	-	-
McDonald Motor Engineers	LNK	128	0.048	231	0.087	0.135	38
Milngavie Motors	GW	794	0.069	1349	0.117	0.185	2749
Mogil Motors	STIR/DMF & GAL	976	0.073	2948	0.219	0.292	1529
Peat Road Motors	GW	1009	0.054	916	0.049	0.104	594
H. Prosser & Sons	GW	1129	0.068	1606	0.096	0.164	888
Queens Garage	GW	186	0.060	486	0.157	0.217	68
Rosefield Motors	AYR	324	0.028	964	0.083	0.111	1317
Ross Motors	LTH	-	-	993	0.309	-	1045
S.M.T.	LTH	9156	0.070	18476	0.142	0.213	15969
St. Roque's Auto Co.	PTH & KIN	434	0.067	417	0.065	0.132	347
Industry Sub-Totals		40440	0.057	88273	0.124	0.181	75026

Sears Motor Group	LTH	-	-	-	-	-	-
Ian Skelly	GW/LNK	1568	0.068	2707	0.117	0.185	1801
J.M. Sloan & Co.	LTH	402	0.084	728	0.152	0.237	814
Stout Brothers	PTH & KIN	515	0.077	381	0.057	0.134	337
Strathford Motor Co.	GW	397	0.068	530	0.090	0.158	481
Taggarts	FIFE/GW/LNK	2314	0.050	5190	0.111	0.161	4684
Tomkins Brothers	GW	251	0.039	415	0.064	0.103	298
Town & County Motors	ABD	1909	0.058	2297	0.070	0.127	2625
Trust Motors	LTH/GW/LNK	1580	0.060	1182	0.045	0.104	1113
Watson Brothers	LNK	923	0.065	3115	0.219	0.284	763
West End Garage	PTH & KIN	85	0.032	368	0.139	0.172	78
Wylie & Lockhead	GW	-	-	-	-	-	-
Wylie's	GW	1958	0.087	3167	0.140	0.227	2103
J.B. Wyllie	AYR	166	0.072	77	0.033	0.105	226
Abercromby Corporation	-	-	-	-	-	-	-
Annandale Motors	LTH	87	0.095	93	0.101	0.196	45
Eastern Motor Co.	LTH	1755	0.063	2745	0.098	0.160	1988
John Martin Holdings	LTH	3955	0.083	10675	0.225	0.308	5242
Peoples	GW	-	-	-	-	-	-
Western Automobile Co.	LTH	1066	0.053	2388	0.119	0.172	1782
Forfar Motor Co.	-	-	-	-	-	-	-
Ness Motors	HLAND	376	0.046	649	0.079	0.124	339
P.S. Nicholson	HLAND	194	0.090	676	0.314	0.404	330
Tayford Motor Co.	PTH & KIN	728	0.057	1581	0.124	0.182	256
Industry Totals		60669	0.061	127237	0.126	0.185	100331

VEHICLE DISTRIBUTION (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Motors	7.207	1556	1534	1.014	0.5	111.8	-
Alexander Holdings	15.341	9598	7427	1.292	1.4	47.6	-
Armour Motors	5.076	1390	1087	1.279	0.7	98.8	-
George Bicket & Co.	6.790	707	565	1.251	0.8	37.0	-
Blackburn & Price	3.083	351	194	1.809	0.5	42.8	-
The Braedale Garage	1.950	480	247	1.943	0.2	-	-
A. Buchan	1.059	250	273	0.916	4.4	-	-
Callanders Engineering Co.	12.300	2725	2180	1.250	0.8	39.5	0.0
Cameron Motors	8.971	1158	840	1.379	0.6	0.0	-
Clanford Motors	8.854	2577	2094	1.231	0.7	11.6	-
Arnold Clark Autos	27.213	10897	17558	0.621	6.1	66.7	-
J. Clark	27.767	1099	887	1.239	1.1	55.6	0.0
A. Clark's West End Motors	3.029	8949	7773	1.151	2.4	36.3	0.0
Cochranes Garages	7.358	1918	4255	0.451	2.7	53.4	-
Cordiners Garage	10.363	3100	2503	1.239	0.5	33.5	-
Thomas Corrie	11.315	1174	796	1.475	0.2	25.5	0.0
County Garage Co.	2.063	290	323	0.898	-	-	-
Croall, Bryson & Co.	4.833	1155	887	1.302	1.5	178.5	0.0
J. Dodds & Sons	11.810	653	253	2.581	1.8	20.0	-
W. Dunnet & Co.	5.163	630	255	2.471	0.2	7.9	-
Edina Garages	5.500	279	120	2.325	0.0	2.2	-
J. Ferries & Co.	5.255	433	266	1.628	0.3	21.9	-
Flear & Thomson	3.034	445	160	2.781	0.1	3.6	-
Grassick's Garage	4.972	828	347	2.386	0.1	12.5	0.0
The Harper Motor Co.	7.288	3718	2520	1.475	0.7	78.1	0.0
D. Harrison	-	-	-	-	-	-	-
Glen Henderson Motors	17.916	2943	2960	0.994	1.4	45.3	-
Inveralmond Motors	4.400	743	504	1.474	0.0	0.0	-
Laidlaw	8.393	11299	9296	1.215	0.9	38.8	0.0
G.C. MacAndrew & Co.	10.041	407	334	1.219	0.4	32.5	-
MacHarg Rennie & Lindsay	3.467	1413	900	1.570	0.2	4.5	-
MacKay & Jardine	1.619	1673	340	4.921	0.0	10.6	-
Mackays Garage	-	-	-	-	-	-	-
MacOnochies of Kilmarnock	9.116	1270	959	1.324	0.3	40.0	0.0
G.C. McDiarmid	-	-	-	-	-	-	-
McDonald Motor Engineers	2.000	229	36	6.361	0.0	-	-
Milngavie Motors	27.490	1845	3245	0.569	3.2	93.9	-
Mogil Motors	4.793	2968	1449	2.048	0.1	5.5	0.0
Peat Road Motors	3.110	1359	1037	1.311	0.5	17.1	-
H. Prosser & Sons	5.656	2353	1635	1.439	0.8	180.9	-
Queens Garage	1.943	581	163	3.564	-	-	-
Rosefield Motors	18.549	2070	2423	0.854	1.2	64.5	-
Ross Motors	23.750	473	525	0.901	1.4	-	-
S.M.T.	11.497	22068	19561	1.128	-	-	-
St. Roque's Auto Co.	5.338	622	552	1.127	1.1	66.7	-
Industry Sub-Totals		110676	101263				

Sears Motor Group	-	-	-	-	-	-	-
Ian Skelly	18.378	7462	7741	0.964	1.7	130.3	0.0
J.M. Sloan & Co.	11.000	909	995	0.914	1.8	15.6	-
Stout Brothers	4.554	663	619	1.071	2.6	126.9	0.0
Strathford Motor Co.	9.431	713	664	1.074	0.9	44.9	-
Taggarts	11.424	7166	6660	1.076	0.4	77.8	-
Tomkins Brothers	6.478	1214	1097	1.107	0.4	70.6	-
Town & County Motors	9.511	3187	3515	0.907	0.6	76.3	-
Trust Motors	11.840	5238	5169	1.013	1.3	22.2	0.0
Watson Brothers	6.521	3499	1147	3.051	0.1	27.7	-
West End Garage	3.120	365	75	4.867	0.5	-	-
Wylie & Lockhead	-	-	-	-	-	-	-
Wylie's	8.654	4159	3095	1.344	0.4	40.1	-
J.B. Wyllie	8.370	123	272	0.452	4.8	-	-
Abercromby Corporation	-	-	-	-	-	-	-
Annandale Motors	4.500	115	67	1.716	-	-	-
Eastern Motor Co.	8.460	4050	3293	1.230	-	-	-
John Martin Holdings	13.271	14410	8977	1.605	-	-	-
Peoples	-	-	-	-	-	-	-
Western Automobile Co.	11.138	2980	2374	1.255	-	-	-
Forfar Motor Co.	-	-	-	-	-	-	-
Ness Motors	4.985	1090	780	1.397	-	-	-
P.S. Nicholson	8.462	486	140	3.471	-	-	-
Tayford Motor Co.	2.349	1827	502	3.639	0.0	19.3	-
Industry Totals	8.674	170332	148445	1.665	1.1	48.6	0.0

VEHICLE DISTRIBUTION (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Motors	279	23377	1.193	72.600	226	103.438
Alexander Holdings	905	68156	1.328	17.316	423	161.125
Armour Motors	127	11550	1.100	19.652	75	154.000
George Bicket & Co.	118	5876	2.008	-11.064	64	91.813
Blackburn & Price	67	2789	2.402	15.105	28	99.607
The Braedale Garage	16	2025	0.790	7.885	20	101.250
A. Buchan	5	3875	0.129	7.281	19	203.947
Callanders Engineering Co.	548	18341	2.988	12.833	89	206.079
Cameron Motors	226	4352	5.193	-1.894	34	128.000
Clanford Motors	693	20074	3.452	25.903	154	130.351
Arnold Clark Autos	3126	91367	3.421	19.104	835	109.422
J. Clark	62	6103	1.016	3.793	42	145.310
A. Clark's West End Motors	555	21344	2.600	-42.534	175	121.966
Cochranes Garages	544	13931	3.905	0.216	104	133.952
Cordiners Garage	266	21258	1.251	0.749	187	113.679
Thomas Corrie	31	5773	0.537	8.556	51	113.196
County Garage Co.	-35	3375	-1.037	26.832	17	198.529
Croall, Bryson & Co.	17	9593	0.177	6.141	94	102.053
J. Dodds & Sons	-1	2775	-0.036	19.715	43	64.535
W. Dunnet & Co.	36	2899	1.242	4.619	43	67.419
Edina Garages	36	2868	1.255	6.657	25	114.720
J. Ferries & Co.	58	3683	1.575	22.890	54	68.204
Flear & Thomson	104	4317	2.409	0.395	32	134.906
Grassick's Garage	61	6048	1.009	13.174	37	163.459
The Harper Motor Co.	161	21166	0.761	19.353	171	123.778
D. Harrison	26	1750	1.486	5.932	23	76.087
Glen Henderson Motors	183	13057	1.402	-0.229	131	99.672
Inveralmond Motors	133	2880	4.618	17.599	25	115.200
Laidlaw	1237	112397	1.101	25.033	728	154.391
G.C. MacAndrew & Co.	62	4652	1.333	14.440	49	94.939
MacHarg Rennie & Lindsay	298	13438	2.218	57.816	89	150.989
MacKay & Jardine	199	9661	2.060	9.523	56	172.518
Mackays Garage	211	5897	3.578	26.627	57	103.456
MacOnochies of Kilmarnock	287	18597	1.543	14.910	140	132.836
G.C. McDiarmid	12	2233	0.537	11.039	22	101.500
McDonald Motor Engineers	82	3497	2.345	31.664	17	205.706
Milngavie Motors	3	13659	0.022	18.137	94	145.309
Mogil Motors	238	16486	1.444	22.572	318	51.843
Peat Road Motors	103	26876	0.383	45.166	247	108.810
H. Prosser & Sons	181	21235	0.852	27.026	140	151.679
Queens Garage	90	3767	2.389	21.555	38	99.132
Rosefield Motors	75	11027	0.680	-5.258	69	159.812
Ross Motors	98	1117	8.774	-65.289	26	42.962
S.M.T.	1884	135764	1.388	4.429	1417	95.811
St. Roque's Auto Co.	104	8012	1.298	24.025	68	117.824
Industry Sub-Totals	13511	802917			6796	

Sears Motor Group	6221	265721	2.341	17.984	2489	106.758
Ian Skelly	704	22866	3.079	-1.308	106	215.717
J.M. Sloan & Co.	107	2988	3.581	-37.450	64	46.688
Stout Brothers	14	7493	0.187	11.752	77	97.312
Strathford Motor Co.	173	6552	2.640	11.695	55	119.127
Taggarts	912	57278	1.592	23.012	349	164.120
Tomkins Brothers	28	6858	0.408	5.850	47	145.915
Town & County Motors	52	30445	0.171	-7.798	259	117.548
Trust Motors	617	21753	2.836	-17.724	88	247.193
Watson Brothers	13	13711	0.095	-3.640	120	114.258
West End Garage	65	3117	2.085	18.023	29	107.483
Wylie & Lockhead	-4	1995	-0.201	19.676	48	41.563
Wylie's	257	27507	0.934	21.696	238	115.576
J.B. Wyllie	-114	561	-20.321	-75.756	21	26.714
Abercromby Corporation	-14	4015	-0.349	6.442	67	59.925
Annandale Motors	12	1021	1.175	11.099	11	92.818
Eastern Motor Co.	401	35721	1.123	27.334	249	143.458
John Martin Holdings	-206	67286	-0.306	41.577	474	141.954
Peoples	451	23175	1.946	9.126	175	132.429
Western Automobile Co.	257	25585	1.004	27.093	180	142.139
Forfar Motor Co.	17	2863	0.594	1.850	18	159.056
Ness Motors	33	9644	0.342	17.025	74	130.324
P.S. Nicholson	22	1994	1.103	-7.342	36	55.389
Tayford Motor Co.	151	11911	1.268	-6.242	82	145.256
Industry Totals	23680	1454977	1.628	13.648	12152	119.731

VEHICLE DISTRIBUTION (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Motors	ABD	1655	0.071	1764	0.075	0.146	1550
Alexander Holdings	GW	3248	0.048	8665	0.127	0.175	6788
Armour Motors	GW	687	0.059	771	0.067	0.126	462
George Bicket & Co.	AYR	121	0.021	690	0.117	0.138	498
Blackburn & Price	BDS	-	-	429	0.154	-	93
The Braedale Garage	LNK	108	0.053	272	0.134	0.188	36
A. Buchan	PTH & KIN	100	0.026	-94	-0.024	0.002	20
Callanders Engineering Co.	GW	883	0.048	2049	0.112	0.160	1237
Cameron Motors	PTH & KIN	295	0.068	762	0.175	0.243	307
Clanford Motors	GW	1245	0.062	2256	0.112	0.174	1336
Arnold Clark Autos	GW	6086	0.067	31188	0.341	0.408	28769
J. Clark	ABD	323	0.053	1685	0.276	0.329	1311
A. Clark's West End Motors	GW	154	0.007	216	0.010	0.017	188
Cochranes Garages	LTH	746	0.054	914	0.066	0.119	838
Cordiners Garage	HLAND/ABD	1527	0.072	2662	0.125	0.197	1980
Thomas Corrie	DMF & GAL	342	0.059	861	0.149	0.208	451
County Garage Co.	LNK	81	0.024	247	0.073	0.097	49
Croall, Bryson & Co.	BDS	535	0.056	764	0.080	0.135	513
J. Dodds & Sons	AYR	-	-	1037	0.374	-	517
W. Dunnet & Co.	HLAND	204	0.070	602	0.208	0.278	192
Edina Garages	LTH	185	0.065	316	0.110	0.175	129
J. Ferries & Co.	HLAND	318	0.086	494	0.134	0.220	307
Flear & Thomson	FIFE	179	0.041	523	0.121	0.163	188
Grassick's Garage	PTH & KIN	397	0.066	658	0.109	0.174	227
The Harper Motor Co.	ABD	1301	0.061	2559	0.121	0.182	1558
D. Harrison	BDS	-	-	-	-	-	-
Glen Henderson Motors	AYR	1194	0.091	2772	0.212	0.304	3193
Inveralmond Motors	PTH & KIN	189	0.066	403	0.140	0.206	118
Laidlaw	LNK/LTH	5400	0.048	13905	0.124	0.172	7426
G.C. MacAndrew & Co.	LTH	394	0.085	546	0.117	0.202	492
MacHarg Rennie & Lindsay	GW	634	0.047	970	0.072	0.119	340
MacKay & Jardine	LNK	341	0.035	1532	0.159	0.194	99
Mackays Garage	ABD	-	-	-	-	-	-
MacOnochies of Kilmarnock	AYR	884	0.048	1593	0.086	0.133	1112
G.C. McDiarmid	GW	-	-	-	-	-	-
McDonald Motor Engineers	LNK	222	0.063	271	0.077	0.141	47
Milngavie Motors	GW	781	0.057	1261	0.092	0.150	2673
Mogil Motors	STIR/DMF & GAL	1040	0.063	3194	0.194	0.257	1719
Peat Road Motors	GW	2084	0.078	964	0.036	0.113	627
H. Prosser & Sons	GW	1210	0.057	1724	0.081	0.138	854
Queens Garage	GW	219	0.058	517	0.137	0.195	80
Rosefield Motors	AYR	337	0.031	952	0.086	0.117	1227
Ross Motors	LTH	-	-	1046	0.936	-	1096
S.M.T.	LTH	9484	0.070	3744	0.028	0.097	10813
St. Roque's Auto Co.	PTH & KIN	474	0.059	452	0.056	0.116	448
Industry Sub-Totals		45607		98136			81908

Sears Motor Group	LTH	-	-	-	-	-	-
Ian Skelly	GW/LNK	2679	0.117	3464	0.151	0.269	2446
J.M. Sloan & Co.	LTH	391	0.131	996	0.333	0.464	852
Stout Brothers	PTH & KIN	539	0.072	348	0.046	0.118	332
Strathford Motor Co.	GW	452	0.069	649	0.099	0.168	593
Taggarts	FIFE/GW/LNK	-	-	-	-	-	-
Tomkins Brothers	GW	219	0.032	481	0.070	0.102	402
Town & County Motors	ABD	1865	0.061	2260	0.074	0.135	2595
Trust Motors	LTH/GW/LNK	1727	0.079	1400	0.064	0.144	1386
Watson Brothers	LNK	875	0.064	3066	0.224	0.287	663
West End Garage	PTH & KIN	-	-	373	0.120	-	83
Wylie & Lockhead	GW	-	-	-	-	-	-
Wylie's	GW	2063	0.075	3298	0.120	0.195	2159
J.B. Wyllie	AYR	123	0.219	60	0.107	0.326	119
Abercromby Corporation	-	-	-	-	-	-	-
Annandale Motors	LTH	82	0.080	101	0.099	0.179	47
Eastern Motor Co.	LTH	1826	0.051	2992	0.084	0.135	2090
John Martin Holdings	LTH	3439	0.051	9655	0.143	0.195	4892
Peoples	GW	527	0.023	952	0.041	0.064	529
Western Automobile Co.	LTH	1098	0.043	2537	0.099	0.142	1985
Forfar Motor Co.	-	-	-	-	-	-	-
Ness Motors	HLAND	430	0.045	623	0.065	0.109	325
P.S. Nicholson	HLAND	184	0.092	684	0.343	0.435	319
Tayford Motor Co.	PTH & KIN	661	0.055	1656	0.139	0.195	268
Industry Totals		64787	0.062	133731	0.138	0.182	103993

VEHICLE DISTRIBUTION (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Motors	6.858	3855	3641	1.059	1.0	-	-
Alexander Holdings	16.047	9303	7426	1.253	1.0	47.7	-
Armour Motors	6.160	1828	1519	1.203	1.2	-	-
George Bicket & Co.	7.781	933	741	1.259	0.8	42.5	-
Blackburn & Price	3.321	484	148	3.270	0.6	44.4	-
The Braedale Garage	1.800	364	128	2.844	0.2	-	-
A. Buchan	1.053	143	257	0.556	-	-	-
Callanders Engineering Co.	13.899	2766	1954	1.416	0.9	37.2	0.0
Cameron Motors	9.029	1023	568	1.801	0.0	0.4	-
Clanford Motors	8.675	2608	1688	1.545	0.7	13.5	-
Arnold Clark Autos	34.454	37950	35531	1.068	8.8	-	-
J. Clark	31.214	1364	990	1.378	1.3	48.3	0.0
A. Clark's West End Motors	1.074	388	360	1.078	2.0	-	0.0
Cochranes Garages	8.058	1668	1592	1.048	0.9	51.8	-
Cordiners Garage	10.588	2964	2282	1.299	0.5	31.1	-
Thomas Corrie	8.843	1321	911	1.450	0.3	47.3	0.0
County Garage Co.	2.882	387	173	2.237	-	-	-
Croall, Bryson & Co.	5.457	1254	1003	1.250	1.4	-	0.0
J. Dodds & Sons	12.023	698	178	3.921	1.6	15.7	-
W. Dunnet & Co.	4.465	582	172	3.384	0.2	7.0	-
Edina Garages	5.160	293	106	2.764	0.0	2.2	-
J. Ferries & Co.	5.685	512	325	1.575	0.2	-	-
Flear & Thomson	5.875	537	202	2.658	0.2	3.7	-
Grassick's Garage	6.135	1024	593	1.727	0.1	13.0	0.0
The Harper Motor Co.	9.111	4609	3608	1.277	0.7	65.2	0.0
D. Harrison	-	-	-	-	-	-	-
Glen Henderson Motors	24.374	4211	4632	0.909	1.6	-	-
Inveralmond Motors	4.720	797	512	1.557	0.0	0.0	-
Laidlaw	10.201	20504	14025	1.462	0.7	34.9	0.0
G.C. MacAndrew & Co.	10.041	432	378	1.143	0.5	40.6	-
MacHarg Rennie & Lindsay	3.820	1814	1184	1.532	0.3	5.1	-
MacKay & Jardine	1.768	1800	367	4.905	0.0	11.2	-
Mackays Garage	-	-	-	-	-	-	-
MacOnochies of Kilmarnock	7.943	1469	988	1.487	0.4	48.6	0.0
G.C. McDiarmid	-	-	-	-	-	-	-
McDonald Motor Engineers	2.765	364	140	2.600	0.0	-	-
Milngavie Motors	28.436	1741	3153	0.552	-	-	-
Mogil Motors	5.406	3068	1593	1.926	0.3	6.6	0.0
Peat Road Motors	2.538	2557	2220	1.152	0.5	19.6	-
H. Prosser & Sons	6.100	2841	1971	1.441	-	-	-
Queens Garage	2.105	704	267	2.637	-	-	-
Rosefield Motors	17.783	1899	2174	0.874	1.0	67.5	-
Ross Motors	42.154	636	686	0.927	1.2	-	-
S.M.T.	7.631	15205	22274	0.683	0.7	38.8	0.0
St. Roque's Auto Co.	6.588	670	666	1.006	-	-	-
Industry Sub-Totals		139570	123326				

Sears Motor Group	-	-	-	-	-	-	-
Ian Skelly	23.075	10711	9693	1.105	1.8	-	0.0
J.M. Sloan & Co.	13.313	1170	1026	1.140	1.1	2.9	-
Stout Brothers	4.312	565	549	1.029	2.3	132.7	0.0
Strathford Motor Co.	10.782	940	884	1.063	-	-	-
Taggarts	-	-	-	-	-	-	-
Tomkins Brothers	8.553	1100	1021	1.077	0.4	68.2	-
Town & County Motors	10.019	3095	3430	0.902	0.6	-	-
Trust Motors	15.750	5794	5780	1.002	5.4	20.9	0.0
Watson Brothers	5.525	3437	1031	3.334	0.1	88.8	-
West End Garage	2.862	367	77	4.766	0.5	-	-
Wylie & Lockhead	-	-	-	-	-	-	-
Wylie's	9.071	4878	3739	1.305	0.3	33.2	-
J.B. Wyllie	5.667	77	136	0.566	-	-	-
Abercromby Corporation	-	-	-	-	-	-	-
Annandale Motors	4.273	106	52	2.038	-	-	-
Eastern Motor Co.	8.394	6465	5563	1.162	-	-	-
John Martin Holdings	10.321	15887	11124	1.428	-	-	-
Peoples	3.023	1931	1508	1.281	-	-	-
Western Automobile Co.	11.028	4265	3713	1.149	-	-	-
Forfar Motor Co.	-	-	-	-	-	-	-
Ness Motors	4.392	1100	802	1.372	-	-	-
P.S. Nicholson	8.861	499	134	3.724	-	-	-
Tayford Motor Co.	3.268	2411	1023	2.357	-	-	-
Industry Totals	9.385	204368	174611	1.687	1.0	34.1	0.0

VEHICLE DISTRIBUTION (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberdeen Motors	445	28954	1.537	23.857	254	113.992
Alexander Holdings	1731	84498	2.049	23.977	434	194.696
Armour Motors	153	12091	1.265	4.684	78	155.013
George Bicket & Co.	137	6453	2.123	9.820	67	96.313
Blackburn & Price	58	2844	2.039	1.972	30	94.800
The Braedale Garage	24	2022	1.187	-0.148	20	101.100
A. Buchan	24	4111	0.584	6.090	22	186.864
Callanders Engineering Co.	500	20875	2.395	13.816	85	245.588
Cameron Motors	230	5475	4.201	25.804	38	144.079
Clanford Motors	894	27896	3.205	38.966	152	183.526
Arnold Clark Autos	3251	111230	2.923	21.740	1078	103.182
J. Clark	156	6152	2.536	0.803	31	198.452
A. Clark's West End Motors	686	26439	2.595	23.871	184	143.690
Cochranes Garages	487	17444	2.792	25.217	107	163.028
Cordiners Garage	412	28043	1.469	31.917	197	142.350
Thomas Corrie	11	5378	0.205	-6.842	49	109.755
County Garage Co.	-39	2652	-1.471	-21.422	18	147.333
Croall, Bryson & Co.	49	10337	0.474	7.756	88	117.466
J. Dodds & Sons	0	2449	0.000	-11.748	43	56.953
W. Dunnet & Co.	48	3278	1.464	13.073	45	72.844
Edina Garages	50	3445	1.451	20.119	25	137.300
J. Ferries & Co.	73	4554	1.603	23.649	57	79.895
Flear & Thomson	122	4632	2.634	7.297	36	128.667
Grassick's Garage	40	7569	0.528	25.149	39	194.077
The Harper Motor Co.	284	26666	1.065	25.985	183	145.716
D. Harrison	56	2021	2.771	15.486	27	74.852
Glen Henderson Motors	93	21493	0.433	64.609	165	130.261
Inveralmond Motors	125	3135	3.987	8.854	24	130.625
Laidlaw	870	110222	0.789	-1.935	707	155.901
G.C. MacAndrew & Co.	26	5482	0.474	17.842	50	109.640
MacHarg Rennie & Lindsay	475	22082	2.151	64.325	101	218.634
MacKay & Jardine	418	12811	3.263	32.605	52	246.365
Mackays Garage	207	5998	3.451	1.713	58	103.414
MacOnochies of Kilmarnock	269	18898	1.423	1.619	144	131.236
G.C. McDiarmid	24	2511	0.956	12.450	27	93.000
McDonald Motor Engineers	60	4537	1.322	29.740	22	206.227
Milngavie Motors	79	15891	0.497	16.341	90	176.567
Mogil Motors	244	17542	1.391	6.405	316	55.513
Peat Road Motors	286	30373	0.942	13.012	241	126.029
H. Prosser & Sons	251	22768	1.102	7.219	138	164.986
Queens Garage	44	3459	1.272	-8.176	40	86.475
Rosefield Motors	157	9951	1.578	-9.758	65	153.092
Ross Motors	49	1230	3.984	10.116	26	47.308
S.M.T.	2045	133621	1.530	-1.578	1389	96.199
St. Roque's Auto Co.	139	8773	1.584	9.498	74	118.554
Industry Sub-Totals	15743	908285			7116	

Sears Motor Group	8822	289957	3.043	9.121	2633	110.124
Ian Skelly	1072	25086	4.273	9.709	109	230.147
J.M. Sloan & Co.	117	3556	3.290	19.009	69	51.536
Stout Brothers	61	9065	0.673	20.980	82	110.549
Strathford Motor Co.	166	6987	2.376	6.639	58	120.466
Taggarts	633	74211	0.853	29.563	377	196.846
Tomkins Brothers	32	7765	0.412	13.225	47	165.213
Town & County Motors	-35	16577	-0.211	-45.551	144	115.118
Trust Motors	233	18765	1.242	-13.736	90	208.500
Watson Brothers	80	16071	0.498	17.212	118	136.195
West End Garage	23	3461	0.665	11.036	30	115.367
Wylie & Lockhead	-49	1745	-2.808	-12.531	44	39.659
Wylie's	535	32910	1.626	19.642	245	134.327
J.B. Wyllie	-22	437	-5.034	-22.103	18	24.278
Abercromby Corporation	347	7684	4.516	91.382	73	105.260
Annandale Motors	10	1045	0.957	2.351	10	104.500
Eastern Motor Co.	319	38615	0.826	8.102	261	147.950
John Martin Holdings	195	63420	0.307	-5.746	455	139.385
Peoples	575	29269	1.965	26.296	175	167.251
Western Automobile Co.	253	25372	0.997	-0.833	180	140.956
Forfar Motor Co.	20	3328	0.601	16.242	21	158.476
Ness Motors	59	10021	0.589	3.909	81	123.716
P.S. Nicholson	19	1660	1.145	-16.750	29	57.241
Tayford Motor Co.	163	12489	1.305	4.853	84	148.679
Industry Totals	29371	1607781	1.827	10.502	12549	128.120

VEHICLE DISTRIBUTION (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberdeen Motors	ABD	1235	0.043	1394	0.048	0.091	1172
Alexander Holdings	GW	3514	0.042	10573	0.125	0.167	7857
Armour Motors	GW	590	0.049	697	0.058	0.106	388
George Bicket & Co.	AYR	259	0.040	455	0.071	0.111	396
Blackburn & Price	BDS	140	0.049	230	0.081	0.130	66
The Braedale Garage	LNK	133	0.066	404	0.200	0.266	44
A. Buchan	PTH & KIN	53	0.013	-89	-0.022	-0.009	15
Callanders Engineering Co.	GW	722	0.035	1587	0.076	0.111	1078
Cameron Motors	PTH & KIN	229	0.042	625	0.114	0.156	222
Clanford Motors	GW	1080	0.039	1625	0.058	0.097	1157
Arnold Clark Autos	GW	2860	0.026	13387	0.120	0.146	16382
J. Clark	ABD	301	0.049	1194	0.194	0.243	1198
A. Clark's West End Motors	GW	1189	0.045	1319	0.050	0.095	618
Cochranes Garages	LTH	803	0.046	2023	0.116	0.162	898
Cordiners Garage	HLAND/ABD	1666	0.059	2104	0.075	0.134	2105
Thomas Corrie	DMF & GAL	326	0.061	952	0.177	0.238	693
County Garage Co.	LNK	124	0.047	404	0.152	0.199	139
Croall, Bryson & Co.	BDS	528	0.051	805	0.078	0.129	639
J. Dodds & Sons	AYR	201	0.082	915	0.374	0.456	521
W. Dunnet & Co.	HLAND	-	-	643	0.196	-	197
Edina Garages	LTH	149	0.043	250	0.073	0.116	126
J. Ferries & Co.	HLAND	394	0.087	541	0.119	0.205	360
Flear & Thomson	FIFE	199	0.043	606	0.131	0.174	181
Grassick's Garage	PTH & KIN	316	0.042	652	0.086	0.128	140
The Harper Motor Co.	ABD	1225	0.046	2477	0.093	0.139	1228
D. Harrison	BDS	-	-	-	-	-	-
Glen Henderson Motors	AYR	904	0.042	2182	0.102	0.144	2022
Inveralmond Motors	PTH & KIN	145	0.046	414	0.132	0.178	100
Laidlaw	LNK/LTH	4719	0.043	8025	0.073	0.116	5621
G.C. MacAndrew & Co.	LTH	332	0.061	563	0.103	0.163	506
MacHarg Rennie & Lindsay	GW	427	0.019	592	0.027	0.046	209
MacKay & Jardine	LNK	385	0.030	1838	0.143	0.174	137
Mackays Garage	ABD	-	-	-	-	-	-
MacOnochies of Kilmarnock	AYR	712	0.038	1354	0.072	0.109	1040
G.C. McDiarmid	GW	-	-	-	-	-	-
McDonald Motor Engineers	LNK	268	0.059	309	0.068	0.127	76
Milngavie Motors	GW	676	0.043	1134	0.071	0.114	2366
Mogil Motors	STIR/DMF & GAL	1136	0.065	2830	0.161	0.226	1273
Peat Road Motors	GW	870	0.029	695	0.023	0.052	388
H. Prosser & Sons	GW	996	0.044	1559	0.068	0.112	836
Queens Garage	GW	161	0.047	403	0.116	0.163	52
Rosefield Motors	AYR	372	0.037	877	0.088	0.126	1481
Ross Motors	LTH	-	-	999	0.812	-	890
S.M.T.	LTH	8471	0.063	13070	0.098	0.161	12981
St. Roque's Auto Co.	PTH & KIN	370	0.042	335	0.038	0.080	280
Industry Sub-Totals		39181		82954			68079

Sears Motor Group	LTH	-	-	-	-	-	-
Ian Skelly	GW/LNK	1753	0.070	2966	0.118	0.188	1584
J.M. Sloan & Co.	LTH	339	0.095	597	0.168	0.263	555
Stout Brothers	PTH & KIN	597	0.066	349	0.038	0.104	345
Strathford Motor Co.	GW	406	0.058	513	0.073	0.132	522
Taggarts	FIFE/GW/LNK	-	-	-	-	-	-
Tomkins Brothers	GW	246	0.032	493	0.063	0.095	418
Town & County Motors	ABD	1704	0.103	2299	0.139	0.241	2614
Trust Motors	LTH/GW/LNK	1441	0.077	945	0.050	0.127	840
Watson Brothers	LNK	986	0.061	3079	0.192	0.253	1334
West End Garage	PTH & KIN	115	0.033	360	0.104	0.137	81
Wylie & Lockhead	GW	-	-	-	-	-	-
Wylie's	GW	2296	0.070	10916	0.332	0.401	2318
J.B. Wyllie	AYR	76	0.174	52	0.119	0.293	115
Abercromby Corporation	-	-	-	-	-	-	-
Annandale Motors	LTH	81	0.078	109	0.104	0.182	48
Eastern Motor Co.	LTH	-	-	-	-	-	-
John Martin Holdings	LTH	-	-	-	-	-	-
Peoples	GW	629	0.021	989	0.034	0.055	508
Western Automobile Co.	LTH	-	-	-	-	-	-
Forfar Motor Co.	-	-	-	-	-	-	-
Ness Motors	HLAND	-	-	-	-	-	-
P.S. Nicholson	HLAND	-	-	-	-	-	-
Tayford Motor Co.	PTH & KIN	-	-	-	-	-	-
Industry Totals		49851	0.053	106621	0.120	0.158	79361

VEHICLE DISTRIBUTION (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberdeen Motors	4.615	2647	2425	1.091	-	-	-
Alexander Holdings	18.104	10772	8056	1.337	-	-	-
Armour Motors	4.974	1399	1093	1.281	-	-	-
George Bicket & Co.	5.913	589	483	1.220	-	-	-
Blackburn & Price	2.213	318	154	2.064	-	-	-
The Braedale Garage	2.200	468	108	4.333	-	-	-
A. Buchan	0.682	40	144	0.278	-	-	-
Callanders Engineering Co.	12.687	2200	1711	1.285	-	-	-
Cameron Motors	5.853	922	519	1.777	-	-	-
Clanford Motors	7.611	2304	1805	1.276	-	-	-
Arnold Clark Autos	15.197	13658	16628	0.821	-	-	-
J. Clark	38.645	948	838	1.132	-	-	-
A. Clark's West End Motors	3.360	3974	3273	1.214	-	-	-
Cochranes Garages	8.393	1903	3239	0.588	-	-	-
Cordiners Garage	10.685	2130	2131	1.000	-	-	-
Thomas Corrie	14.147	1171	924	1.267	-	-	-
County Garage Co.	7.711	371	173	2.145	-	-	-
Croall, Bryson & Co.	7.261	1426	1260	1.132	-	-	-
J. Dodds & Sons	12.107	629	234	2.683	-	-	-
W. Dunnet & Co.	4.369	652	206	3.167	-	-	-
Edina Garages	5.048	227	102	2.213	-	-	-
J. Ferries & Co.	6.316	591	410	1.441	-	-	-
Flear & Thomson	5.028	585	160	3.656	-	-	-
Grassick's Garage	3.585	899	387	2.322	-	-	-
The Harper Motor Co.	6.710	3772	2524	1.495	-	-	-
D. Harrison	-	-	-	-	-	-	-
Glen Henderson Motors	12.255	2768	2608	1.061	-	-	-
Inveralmond Motors	4.175	673	359	1.874	-	-	-
Laidlaw	7.950	13243	10840	1.222	-	-	-
G.C. MacAndrew & Co.	10.124	404	347	1.166	-	-	-
MacHarg Rennie & Lindsay	2.071	1052	668	1.573	-	-	-
MacKay & Jardine	2.635	2237	536	4.174	-	-	-
Mackays Garage	-	-	-	-	-	-	-
MacOnochies of Kilmarnock	7.221	1349	1034	1.304	-	-	-
G.C. McDiarmid	-	-	-	-	-	-	-
McDonald Motor Engineers	3.455	556	323	1.721	-	-	-
Milngavie Motors	26.289	1670	2901	0.575	-	-	-
Mogil Motors	4.028	2948	1516	1.945	-	-	-
Peat Road Motors	1.611	1154	847	1.362	-	-	-
H. Prosser & Sons	6.055	2424	1700	1.426	-	-	-
Queens Garage	1.305	563	212	2.654	-	-	-
Rosefield Motors	22.785	2612	3216	0.812	-	-	-
Ross Motors	34.231	718	609	1.179	-	-	-
S.M.T.	9.346	20567	20477	1.004	-	-	-
St. Roque's Auto Co.	3.781	520	464	1.119	-	-	-
Industry Sub-Totals		110051	97646				

Sears Motor Group	-	-	-	-	-	-	-
Ian Skelly	14.534	8927	8781	1.017	-	-	-
J.M. Sloan & Co.	8.043	961	919	1.046	-	-	-
Stout Brothers	4.207	678	674	1.006	-	-	-
Strathford Motor Co.	8.997	792	800	0.989	-	-	-
Taggarts	-	-	-	-	-	-	-
Tomkins Brothers	8.894	1115	1040	1.072	-	-	-
Town & County Motors	18.154	2988	3304	0.905	-	-	-
Trust Motors	9.338	5260	5063	1.039	-	-	-
Watson Brothers	11.302	3033	1316	2.304	-	-	-
West End Garage	2.693	491	208	2.361	-	-	-
Wylie & Lockhead	-	-	-	-	-	-	-
Wylie's	9.461	17066	8468	2.015	-	-	-
J.B. Wyllie	6.389	86	149	0.577	-	-	-
Abercromby Corporation	-	-	-	-	-	-	-
Annandale Motors	4.800	112	51	2.196	-	-	-
Eastern Motor Co.	-	-	-	-	-	-	-
John Martin Holdings	-	-	-	-	-	-	-
Peoples	2.903	2015	1534	1.314	-	-	-
Western Automobile Co.	-	-	-	-	-	-	-
Forfar Motor Co.	-	-	-	-	-	-	-
Ness Motors	-	-	-	-	-	-	-
P.S. Nicholson	-	-	-	-	-	-	-
Tayford Motor Co.	-	-	-	-	-	-	-
Industry Totals	8.772	153574	129954	1.568	-	-	-

APPENDIX 18 : Whisky Distilling

Firm Data (1983-88)

Contents :

Profit
Turnover
Profit-Sales Ratio (PSR %)
Annual Sales Growth (Sales %)
Number of Employees (Emp.)
Average Revenue Product (ARP)
Location Code
Wage Bill
Input-Output Ratio for Labour
Capital Employed
Input Output Ratio for Capital
Input Output Ratio (Total)
Fixed Assets (Fx. Ass.)
Fixed Assets per Employee (FA/L)
Current Assets
Current Liabilities
Current Ratio (CR)
Borrowing Ratio (Borrow)
Income Gearing (Inc. Gr.)
Export Ratio (XR)

WHISKY DISTILLING (1983)

Firms	Profit	Turnover	PSR (%)	Emp.	ARP
Aberlour-Glenlivet Distiller Co.	42	2261	1.858	22	102.773
Amalgamated Distilleries PLC	4672	176771	2.643	2009	87.990
G. Ballantyne & Son	185	16320	1.134	150	108.800
Barton Distilling	247	11255	2.195	56	200.982
A. Bell & Sons	31265	246723	12.672	1729	142.697
S. Campbell & Sons	1100	8738	12.589	133	65.699
Campbells	537	3006	17.864	45	66.800
Chivas Brothers	10432	94752	11.010	1204	78.698
J. Dewar & Sons	23387	63143	37.038	678	93.131
The Distillers Co. PLC	209300	1127200	18.568	18180	62.002
The Glencadam Distillery Co.	23	2853	0.806	45	63.400
Glenlivet Distilleries	2413	8907	27.091	125	71.256
Matthew Gloag & Sons	100	78125	0.128	82	952.744
J. Grant & Co.	422	1569	26.896	31	50.613
J. Haig & Co.	6018	61966	9.712	728	85.118
Highland Distilleries Co. PLC	7047	84927	8.298	262	324.149
Hill Thompson & Co.	1778	11744	15.140	155	75.768
Inver House Distilleries	149	32218	0.462	275	117.156
The Invergordon Distilleries	4003	22494	17.796	328	68.579
Lang Brothers	12	7870	0.152	56	140.536
W. Lawson	2241	8097	27.677	101	80.168
Long John International	2098	55351	3.790	503	110.042
MacAllan-Glenlivet PLC	686	3927	17.469	48	81.813
MacDonald Martin Distilleries	1964	14650	13.406	201	72.886
S.P. Morrison	1017	15619	6.511	161	97.012
North British Distillery Co.	2033	11499	17.680	303	37.950
Robertson & Baxter	9549	44165	21.621	155	284.935
Scottish Malt Distillers	-6253	37142	-16.835	1448	25.651
Scottish Grain Distillers	-3903	44854	-8.702	1929	23.252
Seagram Distilleries PLC	18355	224488	8.176	3134	71.630
J. & G. Stodart	117	1506	7.769	40	37.650
W.M. Teacher & Sons PLC	10604	102297	10.366	550	185.995
Hiram Walker & Sons PLC	25248	100328	25.165	1470	68.250
White Horse Distillers	10087	66446	15.181	805	82.542
James Burrough Distillers PLC	3998	59432	6.727	400	148.580
Whyte & MacKay Distillers	1285	90327	1.423	191	472.916
Bloch Brothers	4	447	0.895	17	26.294
Industry Totals	382262	2943417	12.987	37749	77.973

WHISKY DISTILLING (1983)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberlour-Glenlivet Distiller Co.	ABD	127	0.056	704	0.311	0.368	406
Amalgamated Distilleries PLC	LTH	8481	0.048	43449	0.246	0.294	15781
G. Ballantyne & Son	MORAY	-	-	2706	0.166	-	4828
Barton Distilling	GW	352	0.031	7200	0.640	0.671	1456
A. Bell & Sons	PTH & KIN	14847	0.060	159783	0.648	0.708	52184
S. Campbell & Sons	AYR	773	0.088	10853	1.242	1.331	3298
Campbells	GW	-	-	1830	0.609	-	0
Chivas Brothers	GW	9359	0.099	176079	1.858	1.957	39581
J. Dewar & Sons	PTH & KIN	4163	0.066	28724	0.455	0.521	10990
The Distillers Co. PLC	LTH	130800	0.116	1212100	1.075	1.191	361900
The Glencadam Distillery Co.	ANGUS	-	-	212	0.074	-	100
Glenlivet Distilleries	ABD	-	-	2820	0.317	-	4994
Matthew Gloag & Sons	PTH & KIN	703	0.009	1200	0.015	0.024	981
J. Grant & Co.	HLAND	206	0.131	5261	3.353	3.484	583
J. Haig & Co.	LTH	4819	0.078	23861	0.385	0.463	7296
Highland Distilleries Co. PLC	HLAND	2164	0.025	47693	0.562	0.587	12827
Hill Thompson & Co.	LTH	839	0.071	6076	0.517	0.589	3040
Inver House Distilleries	LNK	2323	0.072	18666	0.579	0.651	6640
The Invergordon Distilleries	HLAND	2153	0.096	30682	1.364	1.460	14727
Lang Brothers	GW	574	0.073	1452	0.184	0.257	298
W. Lawson	LNK	714	0.088	13692	1.691	1.779	2836
Long John International	GW	3678	0.066	74551	1.347	1.413	22763
MacAllan-Glenlivet PLC	ABD	390	0.099	8926	2.273	2.372	3154
MacDonald Martin Distilleries	LTH	1319	0.090	18278	1.248	1.338	8824
S.P. Morrison	GW	1213	0.078	8185	0.524	0.602	3907
North British Distillery Co.	LTH	2171	0.189	16847	1.465	1.654	11251
Robertson & Baxter	GW	1815	0.041	62641	1.418	1.459	10179
Scottish Malt Distillers	MORAY	9765	0.263	14116	0.380	0.643	32018
Scottish Grain Distillers	LTH	12011	0.268	43547	0.971	1.239	43798
Seagram Distilleries PLC	GW	19887	0.089	312103	1.390	1.479	75303
J. & G. Stodart	GW	-	-	1088	0.722	-	662
W.M. Teacher & Sons PLC	GW	3919	0.038	38381	0.375	0.414	11228
Hiram Walker & Sons PLC	GW	11102	0.111	216524	2.158	2.269	94789
White Horse Distillers	GW	5353	0.081	17281	0.260	0.341	7346
James Burrough Distillers PLC	GW	-	-	-	-	-	-
Whyte & MacKay Distillers	GW	-	-	-	-	-	-
Bloch Brothers	GW	-	-	-	-	-	-
Industry Totals		256020	0.090	2627511	0.907	1.088	869968

WHISKY DISTILLING (1983)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberlour-Glenlivet Distiller Co.	18.455	8776	8478	1.035	11.3	-	-
Amalgamated Distilleries PLC	7.855	75324	47656	1.581	1.2	29.7	-
G. Ballantyne & Son	32.187	7360	9482	0.776	3.5	-	-
Barton Distilling	26.000	9046	3302	2.740	0.7	67.5	28.5
A. Bell & Sons	30.182	152309	44710	3.407	0.2	6.6	15.3
S. Campbell & Sons	24.797	15833	8278	1.913	0.6	35.6	-
Campbells	0.000	15171	13341	1.137	7.1	31.4	-
Chivas Brothers	32.875	242747	106249	2.285	0.9	35.3	86.5
J. Dewar & Sons	16.209	93530	75796	1.234	2.4	11.9	-
The Distillers Co. PLC	19.906	1132000	281800	4.017	0.1	5.2	40.3
The Glencadam Distillery Co.	2.222	955	843	1.133	3.8	-	-
Glenlivet Distilleries	39.952	37948	40122	0.946	47.7	-	0.0
Matthew Gloag & Sons	11.963	11039	10820	1.020	1.7	82.4	-
J. Grant & Co.	18.806	5136	458	11.214	4.2	-	0.0
J. Haig & Co.	10.022	88015	71450	1.232	4.7	31.0	-
Highland Distilleries Co. PLC	48.958	46877	12011	3.903	0.1	3.4	5.5
Hill Thompson & Co.	19.613	25172	22136	1.137	3.9	3.6	50.3
Inver House Distilleries	24.145	16974	4948	3.430	1.4	87.4	-
The Invergordon Distilleries	44.899	30013	14058	2.135	0.3	10.4	31.8
Lang Brothers	5.321	2438	1284	1.899	0.4	67.6	-
W. Lawson	28.079	14802	3946	3.751	0.4	10.5	-
Long John International	45.254	56870	5082	11.190	0.4	0.7	-
MacAllan-Glenlivet PLC	65.708	8250	2478	3.329	0.9	35.6	15.3
MacDonald Martin Distilleries	43.900	20469	11015	1.858	0.0	28.5	-
S.P. Morrison	24.267	20451	16173	1.265	-	54.7	64.8
North British Distillery Co.	37.132	8870	3274	2.709	0.0	0.1	0.0
Robertson & Baxter	65.671	64995	12533	5.186	0.0	5.3	-
Scottish Malt Distillers	22.112	67298	85200	0.790	5.7	-	-
Scottish Grain Distillers	22.705	81110	81361	0.997	1.8	-	0.0
Seagram Distilleries PLC	24.028	307360	70560	4.356	0.5	57.3	-
J. & G. Stodart	16.550	483	57	8.474	-	-	-
W.M. Teacher & Sons PLC	20.415	64001	36848	1.737	0.6	20.2	-
Hiram Walker & Sons PLC	64.482	139319	17584	7.923	0.2	13.7	76.1
White Horse Distillers	9.125	78183	68248	1.146	4.1	13.8	-
James Burrough Distillers PLC	-	-	-	-	-	-	-
Whyte & MacKay Distillers	-	-	-	-	-	-	-
Bloch Brothers	-	-	-	-	-	-	-
Industry Totals	27.171	2848618	1191581	2.391	3.5	28.8	29.6

WHISKY DISTILLING (1984)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberlour-Glenlivet Distiller Co.	86	3108	2.767	37.461	22	141.273
Amalgamated Distilleries PLC	9206	251388	3.662	42.211	2170	115.847
G. Ballantyne & Son	-37	25141	-0.147	54.050	150	167.607
Barton Distilling	711	11584	6.138	2.923	76	152.421
A. Bell & Sons	34949	228744	15.279	-7.287	626	365.406
S. Campbell & Sons	1620	9452	17.139	8.171	141	67.035
Campbells	598	2602	22.982	-13.440	45	57.822
Chivas Brothers	16258	96615	16.828	1.966	1062	90.975
J. Dewar & Sons	27076	66527	40.699	5.359	634	104.932
The Distillers Co. PLC	191600	1134100	16.894	0.612	16070	70.572
The Glencadam Distillery Co.	22	3578	0.615	25.412	45	79.511
Glenlivet Distilleries	2290	6525	35.096	-26.743	125	52.200
Matthew Gloag & Sons	92	85029	0.108	8.837	87	977.345
J. Grant & Co.	422	1484	28.437	-5.417	29	51.172
J. Haig & Co.	5731	53359	10.740	-13.890	197	270.858
Highland Distilleries Co. PLC	9514	92209	10.318	8.574	255	361.604
Hill Thompson & Co.	1344	9626	13.962	-18.035	161	59.789
Inver House Distilleries	693	28694	2.415	-10.938	238	120.563
The Invergordon Distilleries	4418	25045	17.640	11.341	323	77.539
Lang Brothers	11	12077	0.091	53.456	56	215.661
W. Lawson	2062	7688	26.821	-5.051	106	72.528
Long John International	5554	57186	9.712	3.315	527	108.512
MacAllan-Glenlivet PLC	760	4746	16.013	20.856	50	94.920
MacDonald Martin Distilleries	2017	16210	12.443	10.648	209	77.560
S.P. Morrison	-616	16868	-3.652	7.997	182	92.681
North British Distillery Co.	3039	16537	18.377	43.813	306	54.042
Robertson & Baxter	10779	48539	22.207	9.904	142	341.824
Scottish Malt Distillers	-6898	39178	-17.607	5.482	1026	38.185
Scottish Grain Distillers	-2858	48406	-5.904	7.919	1639	29.534
Seagram Distilleries PLC	23340	224015	10.419	-0.211	2660	84.216
J. & G. Stodart	106	2684	3.949	78.220	40	67.100
W.M. Teacher & Sons PLC	11994	106184	11.295	3.800	497	213.650
Hiram Walker & Sons PLC	35652	115457	30.879	15.080	1272	90.768
White Horse Distillers	6750	61585	10.960	-7.316	756	81.462
James Burrough Distillers PLC	4343	63435	6.846	6.735	375	169.160
Whyte & MacKay Distillers	1567	101111	1.550	11.939	194	521.191
Bloch Brothers	10	590	1.695	31.991	21	28.095
Industry Totals	404205	3077306	13.135	4.549	32514	94.646

WHISKY DISTILLING (1984)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberlour-Glenlivet Distiller Co.	ABD	158	0.051	759	0.244	0.295	346
Amalgamated Distilleries PLC	LTH	14668	0.058	43379	0.173	0.231	12359
G. Ballantyne & Son	MORAY	-	-	2669	0.106	-	4980
Barton Distilling	GW	518	0.045	8565	0.739	0.784	1436
A. Bell & Sons	PTH & KIN	6157	0.027	182587	0.798	0.825	90849
S. Campbell & Sons	AYR	887	0.094	11472	1.214	1.308	2887
Campbells	GW	-	-	2428	0.933	-	0
Chivas Brothers	GW	8954	0.093	158849	1.644	1.737	76051
J. Dewar & Sons	PTH & KIN	4117	0.062	29615	0.445	0.507	12277
The Distillers Co. PLC	LTH	126300	0.111	1283300	1.132	1.243	377700
The Glencadam Distillery Co.	ANGUS	-	-	234	0.065	-	145
Glenlivet Distilleries	ABD	-	-	2182	0.334	-	5074
Matthew Gloag & Sons	PTH & KIN	814	0.010	1247	0.015	0.024	958
J. Grant & Co.	HLAND	207	0.139	5717	3.852	3.992	615
J. Haig & Co.	LTH	2083	0.039	23113	0.433	0.472	6009
Highland Distilleries Co. PLC	HLAND	2273	0.025	52821	0.573	0.597	13497
Hill Thompson & Co.	LTH	944	0.098	6568	0.682	0.780	2766
Inver House Distilleries	LNK	2249	0.078	18477	0.644	0.722	6065
The Invergordon Distilleries	HLAND	2393	0.096	32991	1.317	1.413	14971
Lang Brothers	GW	640	0.053	1483	0.123	0.176	337
W. Lawson	LNK	744	0.097	14481	1.884	1.980	2720
Long John International	GW	4232	0.074	76677	1.341	1.415	22831
MacAllan-Glenlivet PLC	ABD	424	0.089	9388	1.978	2.067	3426
MacDonald Martin Distilleries	LTH	1467	0.090	19694	1.215	1.305	8885
S.P. Morrison	GW	1450	0.086	8674	0.514	0.600	5067
North British Distillery Co.	LTH	2460	0.149	18736	1.133	1.282	11821
Robertson & Baxter	GW	1839	0.038	69176	1.425	1.463	14400
Scottish Malt Distillers	MORAY	8516	0.217	10525	0.269	0.486	29765
Scottish Grain Distillers	LTH	11307	0.234	43063	0.890	1.123	43179
Seagram Distilleries PLC	GW	19284	0.086	324924	1.450	1.537	96050
J. & G. Stodart	GW	-	-	1194	0.445	-	665
W.M. Teacher & Sons PLC	GW	4052	0.038	41662	0.392	0.431	11348
Hiram Walker & Sons PLC	GW	11018	0.095	225033	1.949	2.044	99600
White Horse Distillers	GW	5052	0.082	17967	0.292	0.374	6331
James Burrough Distillers PLC	GW	-	-	-	-	-	-
Whyte & MacKay Distillers	GW	1658	0.016	14479	0.143	0.160	11288
Bloch Brothers	GW	-	-	-	-	-	-
Industry Totals		246865	0.082	2764129	0.880	1.046	996698

WHISKY DISTILLING (1984)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberlour-Glenlivet Distiller Co.	15.727	10651	10238	1.040	13.1	25.5	0.0
Amalgamated Distilleries PLC	5.695	82007	50987	1.608	0.9	-	-
G. Ballantyne & Son	33.200	9958	12269	0.812	4.6	-	-
Barton Distilling	18.895	9826	2697	3.643	1.0	37.7	31.3
A. Bell & Sons	145.126	131442	39704	3.311	0.2	5.6	16.9
S. Campbell & Sons	20.475	16424	7839	2.095	0.6	27.8	-
Campbells	0.000	18492	16064	1.151	6.6	26.9	-
Chivas Brothers	71.611	219138	136340	1.607	0.8	18.3	85.6
J. Dewar & Sons	19.364	82281	29615	2.778	3.0	10.4	-
The Distillers Co. PLC	23.503	1110000	204400	5.431	0.1	5.6	38.9
The Glencadam Distillery Co.	3.222	936	847	1.105	3.5	-	-
Glenlivet Distilleries	40.592	41890	44782	0.935	57.0	-	12.5
Matthew Gloag & Sons	11.011	12095	11806	1.024	2.7	76.8	-
J. Grant & Co.	21.207	5297	195	27.164	4.7	-	-
J. Haig & Co.	30.503	86044	68940	1.248	4.3	32.0	-
Highland Distilleries Co. PLC	52.929	52932	13608	3.890	0.1	1.6	6.6
Hill Thompson & Co.	17.180	26566	22764	1.167	4.3	3.2	45.1
Inver House Distilleries	25.483	20825	8413	2.475	1.5	61.1	-
The Invergordon Distilleries	46.350	32265	14245	2.265	0.3	7.8	25.9
Lang Brothers	6.018	4224	3078	1.372	1.1	35.3	-
W. Lawson	25.660	16187	4426	3.657	0.4	10.8	91.1
Long John International	43.323	61931	8085	7.660	0.3	0.7	-
MacAllan-Glenlivet PLC	68.520	8961	2999	2.988	1.0	39.0	18.0
MacDonald Martin Distilleries	42.512	23449	12640	1.855	0.0	28.7	-
S.P. Morrison	27.841	20168	16561	1.218	-	156.6	55.5
North British Distillery Co.	38.631	9760	2845	3.431	0.0	0.6	0.0
Robertson & Baxter	101.408	68325	14480	4.719	0.0	0.1	-
Scottish Malt Distillers	29.011	59588	78828	0.756	7.4	-	-
Scottish Grain Distillers	26.345	87803	87919	0.999	2.9	-	-
Seagram Distilleries PLC	36.109	316276	87402	3.619	0.5	37.8	-
J. & G. Stodart	16.625	586	57	10.281	-	-	-
W.M. Teacher & Sons PLC	22.833	71529	41215	1.736	0.6	9.3	-
Hiram Walker & Sons PLC	78.302	149518	24085	6.208	0.2	9.5	83.1
White Horse Distillers	8.374	81052	69416	1.168	5.4	19.4	-
James Burrough Distillers PLC	-	-	-	-	-	-	-
Whyte & MacKay Distillers	58.186	24173	12885	1.876	1.6	46.4	21.9
Bloch Brothers	-	-	-	-	-	-	-
Industry Totals	35.193	2879941	1101449	2.615	4.0	27.2	35.5

WHISKY DISTILLING (1985)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberlour-Glenlivet Distiller Co.	71	3185	2.229	2.477	19	167.632
Amalgamated Distilleries PLC	10199	286133	3.564	13.821	2007	142.568
G. Ballantyne & Son	151	27360	0.552	8.826	150	182.400
Barton Distilling	303	24172	1.254	108.667	78	309.897
A. Bell & Sons	38746	291939	13.272	27.627	603	484.144
S. Campbell & Sons	1692	10621	15.931	12.368	121	87.777
Campbells	769	3234	23.779	24.289	45	71.867
Chivas Brothers	12068	118907	10.149	23.073	1088	109.290
J. Dewar & Sons	33832	77487	43.662	16.475	609	127.236
The Distillers Co. PLC	236200	1274300	18.536	12.362	14900	85.523
The Glencadam Distillery Co.	23	2684	0.857	-24.986	45	59.644
Glenlivet Distilleries	6601	9062	72.843	38.881	125	72.496
Matthew Gloag & Sons	121	92602	0.131	8.906	91	1017.604
J. Grant & Co.	246	1863	13.205	25.539	25	74.520
J. Haig & Co.	7454	39728	18.763	-25.546	119	333.849
Highland Distilleries Co. PLC	9514	101272	9.395	9.829	263	385.065
Hill Thompson & Co.	1490	9819	15.175	2.005	188	52.229
Inver House Distilleries	455	23487	1.937	-18.147	211	111.313
The Invergordon Distilleries	1712	28901	5.924	15.396	356	81.183
Lang Brothers	55	13607	0.404	12.669	57	238.719
W. Lawson	1936	8018	24.146	4.292	101	79.386
Long John International	5949	59807	9.947	4.583	547	109.336
MacAllan-Glenlivet PLC	734	5023	14.613	5.836	46	109.196
MacDonald Martin Distilleries	1729	17334	9.975	6.934	225	77.040
S.P. Morrison	-745	14567	-5.114	-13.641	167	87.228
North British Distillery Co.	3043	17537	17.352	6.047	311	56.389
Robertson & Baxter	11032	56775	19.431	16.968	149	381.040
Scottish Malt Distillers	-7133	32784	-21.758	-16.320	1053	31.134
Scottish Grain Distillers	-2394	47838	-5.004	-1.173	1561	30.646
Seagram Distilleries PLC	26574	298910	8.890	33.433	3035	98.488
J. & G. Stodart	108	3024	3.571	12.668	40	75.600
W.M. Teacher & Sons PLC	10721	103296	10.379	-2.720	469	220.247
Hiram Walker & Sons PLC	35401	123681	28.623	7.123	1325	93.344
White Horse Distillers	5251	40163	13.074	-34.784	607	66.166
James Burrough Distillers PLC	5216	72558	7.189	14.382	373	194.525
Whyte & MacKay Distillers	1222	89457	1.366	-11.526	182	491.522
Bloch Brothers	13	624	2.083	5.763	21	29.714
Industry Totals	460359	3431759	13.415	11.518	31312	109.599

WHISKY DISTILLING (1985)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberlour-Glenlivet Distiller Co.	ABD	157	0.049	828	0.260	0.309	325
Amalgamated Distilleries PLC	LTH	16208	0.057	46664	0.163	0.220	10287
G. Ballantyne & Son	MORAY	-	-	2820	0.103	-	4815
Barton Distilling	GW	601	0.025	3236	0.134	0.159	310
A. Bell & Sons	PTH & KIN	6602	0.023	218325	0.748	0.770	130384
S. Campbell & Sons	AYR	964	0.091	13000	1.224	1.315	2742
Campbells	GW	-	-	3197	0.989	-	0
Chivas Brothers	GW	11759	0.099	213516	1.796	1.895	83621
J. Dewar & Sons	PTH & KIN	4236	0.055	30543	0.394	0.449	12134
The Distillers Co. PLC	LTH	133200	0.105	1410500	1.107	1.211	390600
The Glencadam Distillery Co.	ANGUS	-	-	257	0.096	-	191
Glenlivet Distilleries	ABD	-	-	6530	0.721	-	5010
Matthew Gloag & Sons	PTH & KIN	911	0.010	1225	0.013	0.023	1119
J. Grant & Co.	HLAND	233	0.125	6214	3.335	3.461	604
J. Haig & Co.	LTH	1216	0.031	23703	0.597	0.627	4597
Highland Distilleries Co. PLC	HLAND	2557	0.025	57713	0.570	0.595	14656
Hill Thompson & Co.	LTH	1291	0.131	7786	0.793	0.924	2496
Inver House Distilleries	LNK	2459	0.105	13116	0.558	0.663	6115
The Invergordon Distilleries	HLAND	2898	0.100	31358	1.085	1.185	18503
Lang Brothers	GW	788	0.058	1505	0.111	0.169	386
W. Lawson	LNK	801	0.100	15714	1.960	2.060	2765
Long John International	GW	4658	0.078	75211	1.258	1.335	19497
MacAllan-Glenlivet PLC	ABD	484	0.096	12587	2.506	2.602	3971
MacDonald Martin Distilleries	LTH	1651	0.095	20614	1.189	1.284	9282
S.P. Morrison	GW	1433	0.098	8020	0.551	0.649	5463
North British Distillery Co.	LTH	2705	0.154	19689	1.123	1.277	11792
Robertson & Baxter	GW	1834	0.032	73494	1.294	1.327	19872
Scottish Malt Distillers	MORAY	7726	0.236	4411	0.135	0.370	11191
Scottish Grain Distillers	LTH	11580	0.242	44414	0.928	1.170	46769
Seagram Distilleries PLC	GW	24682	0.083	377996	1.265	1.347	87330
J. & G. Stodart	GW	-	-	1302	0.431	-	711
W.M. Teacher & Sons PLC	GW	3900	0.038	42629	0.413	0.450	10991
Hiram Walker & Sons PLC	GW	12614	0.102	215267	1.741	1.842	107170
White Horse Distillers	GW	4600	0.115	18326	0.456	0.571	5053
James Burrough Distillers PLC	GW	-	-	-	-	-	-
Whyte & MacKay Distillers	GW	1791	0.020	14712	0.164	0.184	11272
Bloch Brothers	GW	-	-	-	-	-	-
Industry Totals		266539	0.086	3036422	0.863	1.015	1042024

WHISKY DISTILLING (1985)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberlour-Glenlivet Distiller Co.	17.105	12656	12133	1.043	14.6	23.8	0.0
Amalgamated Distilleries PLC	5.126	82829	46452	1.783	0.9	-	-
G. Ballantyne & Son	32.100	12289	14284	0.860	5.1	-	-
Barton Distilling	3.974	9584	6638	1.444	1.3	67.9	12.6
A. Bell & Sons	216.226	120518	32577	3.699	0.1	5.0	17.8
S. Campbell & Sons	22.661	17520	7262	2.413	0.5	29.9	-
Campbells	0.000	21439	18242	1.175	5.7	24.8	-
Chivas Brothers	76.858	258216	128321	2.012	1.0	29.0	84.4
J. Dewar & Sons	19.924	88391	30543	2.894	2.9	8.5	-
The Distillers Co. PLC	26.215	1314100	294200	4.467	0.3	11.7	37.1
The Glencadam Distillery Co.	4.244	1403	1337	1.049	5.2	-	-
Glenlivet Distilleries	40.080	48031	46511	1.033	8.0	-	11.8
Matthew Gloag & Sons	12.297	13741	13635	1.008	4.4	77.6	8.0
J. Grant & Co.	24.160	6040	430	14.047	5.0	-	-
J. Haig & Co.	38.630	82878	63770	1.300	3.8	26.6	-
Highland Distilleries Co. PLC	55.726	58330	15273	3.819	0.1	1.1	7.4
Hill Thompson & Co.	13.277	27460	22170	1.239	3.4	2.6	79.2
Inver House Distilleries	28.981	18979	10264	1.849	2.4	-	-
The Invergordon Distilleries	51.975	51384	38529	1.334	0.9	22.4	24.1
Lang Brothers	6.772	3818	2699	1.415	0.9	5.2	-
W. Lawson	27.376	18249	5300	3.443	0.4	14.0	90.3
Long John International	35.644	67487	11773	5.732	0.3	0.2	-
MacAllan-Glenlivet PLC	86.326	10500	1884	5.573	0.1	46.5	25.5
MacDonald Martin Distilleries	41.253	23544	12212	1.928	0.0	37.6	27.3
S.P. Morrison	32.713	18272	16232	1.126	-	142.1	55.9
North British Distillery Co.	37.916	11406	3510	3.250	0.0	0.4	0.0
Robertson & Baxter	133.369	72153	18531	3.894	0.0	0.1	-
Scottish Malt Distillers	10.628	55458	62238	0.891	12.9	-	-
Scottish Grain Distillers	29.961	91738	94093	0.975	3.1	-	-
Seagram Distilleries PLC	28.774	375791	85125	4.415	0.5	43.2	-
J. & G. Stodart	17.775	645	54	11.944	-	-	-
W.M. Teacher & Sons PLC	23.435	67625	35987	1.879	0.5	5.3	9.7
Hiram Walker & Sons PLC	80.883	154954	46857	3.307	0.3	9.3	84.7
White Horse Distillers	8.325	74044	60771	1.218	5.0	23.6	-
James Burrough Distillers PLC	-	-	-	-	-	-	-
Whyte & MacKay Distillers	61.934	23226	11954	1.943	1.9	87.9	14.8
Bloch Brothers	-	-	-	-	-	-	-
Industry Totals	38.647	3219213	1213206	2.653	2.8	28.7	32.8

WHISKY DISTILLING (1986)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberlour-Glenlivet Distiller Co.	13	3049	0.426	-4.270	17	179.353
Amalgamated Distilleries PLC	11899	295411	4.028	3.243	2106	140.271
G. Ballantyne & Son	549	30985	1.772	13.249	153	202.516
Barton Distilling	693	9039	7.667	-62.605	24	376.625
A. Bell & Sons	61564	325599	18.908	11.530	621	524.314
S. Campbell & Sons	1941	11241	17.267	5.837	130	86.469
Campbells	1091	3785	28.824	17.038	45	84.111
Chivas Brothers	26749	135761	19.703	14.174	1250	108.609
J. Dewar & Sons	29054	76495	37.982	-1.280	572	133.733
The Distillers Co. PLC	232800	1335233	17.435	4.782	15000	89.016
The Glencadam Distillery Co.	19	2437	0.780	-9.203	44	55.386
Glenlivet Distilleries	2983	19941	14.959	120.051	40	498.525
Matthew Gloag & Sons	114	99035	0.115	6.947	118	839.280
J. Grant & Co.	252	1998	12.613	7.246	26	76.846
J. Haig & Co.	4965	34223	14.508	-13.857	89	384.528
Highland Distilleries Co. PLC	10321	107996	9.557	6.640	286	377.608
Hill Thompson & Co.	1144	9011	12.696	-8.229	214	42.107
Inver House Distilleries	-1564	23372	-6.692	-0.490	153	152.758
The Invergordon Distilleries	2220	59979	3.701	107.533	449	133.584
Lang Brothers	60	9402	0.638	-30.903	53	177.396
W. Lawson	2556	9695	26.364	20.915	101	95.990
Long John International	4706	74094	6.351	23.889	544	136.202
MacAllan-Glenlivet PLC	1162	6372	18.236	26.856	46	138.522
MacDonald Martin Distilleries	2220	19595	11.329	13.044	240	81.646
S.P. Morrison	231	15355	1.504	5.409	143	107.378
North British Distillery Co.	3012	17033	17.683	-2.874	302	56.401
Robertson & Baxter	10994	50803	21.640	-10.519	161	315.547
Scottish Malt Distillers	-4550	22792	-19.963	-30.478	761	29.950
Scottish Grain Distillers	-291	44856	-0.649	-6.234	1426	31.456
Seagram Distilleries PLC	35103	342104	10.261	14.451	3102	110.285
J. & G. Stodart	107	2888	3.705	-4.497	40	72.200
W.M. Teacher & Sons PLC	8075	107621	7.503	4.187	399	269.727
Hiram Walker & Sons PLC	30536	134386	22.723	8.655	1384	97.100
White Horse Distillers	9039	42424	21.306	5.630	570	74.428
James Burrough Distillers PLC	5318	69438	7.659	-4.300	407	170.609
Whyte & MacKay Distillers	954	76810	1.242	-14.138	192	400.052
Bloch Brothers	17	719	2.364	15.224	23	31.261
Industry Totals	496056	3630977	13.662	5.805	31231	116.262

WHISKY DISTILLING (1986)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberlour-Glenlivet Distiller Co.	ABD	-	-	-	-	-	-
Amalgamated Distilleries PLC	LTH	-	-	-	-	-	-
G. Ballantyne & Son	MORAY	-	-	3369	0.109	-	4663
Barton Distilling	GW	212	0.023	3927	0.434	0.458	5309
A. Bell & Sons	PTH & KIN	6935	0.021	162200	0.498	0.519	73183
S. Campbell & Sons	AYR	1045	0.093	14536	1.293	1.386	2723
Campbells	GW	-	-	4288	1.133	-	0
Chivas Brothers	GW	13105	0.097	230569	1.698	1.795	72063
J. Dewar & Sons	PTH & KIN	4707	0.062	30958	0.405	0.466	6086
The Distillers Co. PLC	LTH	-	-	-	-	-	-
The Glencadam Distillery Co.	ANGUS	-	-	275	0.113	-	198
Glenlivet Distilleries	ABD	-	-	5257	0.264	-	5415
Matthew Gloag & Sons	PTH & KIN	1322	0.013	1228	0.012	0.026	1334
J. Grant & Co.	HLAND	249	0.125	6321	3.164	3.288	666
J. Haig & Co.	LTH	1101	0.032	14165	0.414	0.446	2647
Highland Distilleries Co. PLC	HLAND	3110	0.029	62250	0.576	0.605	15335
Hill Thompson & Co.	LTH	1629	0.181	8878	0.985	1.166	2831
Inver House Distilleries	LNK	1656	0.071	11416	0.488	0.559	4182
The Invergordon Distilleries	HLAND	4080	0.068	34081	0.568	0.636	18471
Lang Brothers	GW	792	0.084	1519	0.162	0.246	396
W. Lawson	LNK	841	0.087	17335	1.788	1.875	2616
Long John International	GW	4909	0.066	79288	1.070	1.136	19150
MacAllan-Glenlivet PLC	ABD	592	0.093	13376	2.099	2.192	4216
MacDonald Martin Distilleries	LTH	1923	0.098	21825	1.114	1.212	9164
S.P. Morrison	GW	1257	0.082	7977	0.520	0.601	5712
North British Distillery Co.	LTH	2691	0.158	20647	1.212	1.370	12396
Robertson & Baxter	GW	2084	0.041	77602	1.528	1.569	24447
Scottish Malt Distillers	MORAY	7071	0.310	1994	0.087	0.398	11378
Scottish Grain Distillers	LTH	12713	0.283	45008	1.003	1.287	49063
Seagram Distilleries PLC	GW	25926	0.076	400078	1.169	1.245	75054
J. & G. Stodart	GW	-	-	-	-	-	-
W.M. Teacher & Sons PLC	GW	3915	0.036	41139	0.382	0.419	10185
Hiram Walker & Sons PLC	GW	25926	0.193	198104	1.474	1.667	105361
White Horse Distillers	GW	5392	0.127	23446	0.553	0.680	14294
James Burrough Distillers PLC	GW	4909	0.071	79288	1.142	1.213	26449
Whyte & MacKay Distillers	GW	2045	0.027	15036	0.196	0.222	14634
Bloch Brothers	GW	-	-	1707	2.374	-	-
Industry Totals		142137	0.095	1639087	0.910	1.024	599621

WHISKY DISTILLING (1986)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberlour-Glenlivet Distiller Co.	-	-	-	-	-	-	-
Amalgamated Distilleries PLC	-	-	-	-	-	-	-
G. Ballantyne & Son	30.477	10392	11686	0.889	3.5	-	-
Barton Distilling	221.208	5024	6406	0.784	1.4	53.2	18.4
A. Bell & Sons	117.847	143997	54980	2.619	0.3	1.7	14.5
S. Campbell & Sons	20.946	21076	9263	2.275	0.5	19.3	-
Campbells	0.000	25603	21315	1.201	5.4	25.7	-
Chivas Brothers	57.650	320678	142944	2.243	0.9	13.7	88.7
J. Dewar & Sons	10.640	90313	30958	2.917	0.1	8.9	-
The Distillers Co. PLC	-	-	-	-	-	-	-
The Glencadam Distillery Co.	4.500	919	842	1.091	-	-	-
Glenlivet Distilleries	135.375	33194	33352	0.995	6.5	-	78.4
Matthew Gloag & Sons	11.305	15167	15273	0.993	5.1	80.9	7.8
J. Grant & Co.	25.615	6180	525	11.771	4.5	-	-
J. Haig & Co.	29.742	24944	13311	1.874	0.1	35.1	97.3
Highland Distilleries Co. PLC	53.619	68766	21851	3.147	0.2	2.0	7.2
Hill Thompson & Co.	13.229	11086	5039	2.200	0.7	3.2	87.1
Inver House Distilleries	27.333	11734	4500	2.608	2.7	-	-
The Invergordon Distilleries	41.138	52470	36860	1.423	0.8	21.4	22.3
Lang Brothers	7.472	2468	1345	1.835	0.4	1.6	-
W. Lawson	25.901	19765	5046	3.917	0.3	9.5	87.4
Long John International	35.202	72191	12053	5.989	0.3	0.2	-
MacAllan-Glenlivet PLC	91.652	11772	2612	4.507	0.1	27.5	24.5
MacDonald Martin Distilleries	38.183	25065	12404	2.021	0.0	28.0	33.3
S.P. Morrison	39.944	18206	15941	1.142	2.1	91.6	66.1
North British Distillery Co.	41.046	11957	3706	3.226	0.0	0.3	0.0
Robertson & Baxter	151.845	73224	20069	3.649	0.0	0.4	-
Scottish Malt Distillers	14.951	34058	43442	0.784	21.2	-	0.0
Scottish Grain Distillers	34.406	89917	93972	0.957	3.1	-	-
Seagram Distilleries PLC	24.195	415932	90908	4.575	0.4	35.7	-
J. & G. Stodart	-	-	-	-	-	-	-
W.M. Teacher & Sons PLC	25.526	64322	33368	1.928	0.3	5.9	7.5
Hiram Walker & Sons PLC	76.128	158725	65982	2.406	0.3	13.7	84.7
White Horse Distillers	25.077	79854	74998	1.065	2.3	37.5	29.1
James Burrough Distillers PLC	64.985	64892	12053	5.384	-	-	-
Whyte & MacKay Distillers	76.219	20729	20327	1.020	6.0	52.1	16.0
Bloch Brothers	-	-	0	-	-	-	-
Industry Totals	49.167	2004620	917331	2.185	2.3	23.7	40.5

WHISKY DISTILLING (1987)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberlour-Glenlivet Distiller Co.	143	4183	3.419	37.193	18	232.389
Amalgamated Distilleries PLC	13975	328643	4.252	11.249	2210	148.707
G. Ballantyne & Son	461	35020	1.316	13.022	160	218.875
Barton Distilling	527	8264	6.377	-8.574	18	459.111
A. Bell & Sons	52411	368653	14.217	13.223	707	521.433
S. Campbell & Sons	2732	15592	17.522	38.707	150	103.947
Campbells	1254	4749	26.406	25.469	49	96.918
Chivas Brothers	26940	144048	18.702	6.104	1188	121.253
J. Dewar & Sons	36955	84362	43.805	10.284	642	131.405
The Distillers Co. PLC	251100	1411100	17.795	5.682	15700	89.879
The Glencadam Distillery Co.	16	2025	0.790	-16.906	40	50.625
Glenlivet Distilleries	40	21452	0.186	7.577	35	612.914
Matthew Gloag & Sons	101	102566	0.098	3.565	126	814.016
J. Grant & Co.	318	2111	15.064	5.656	29	72.793
J. Haig & Co.	6652	44111	15.080	28.893	126	350.087
Highland Distilleries Co. PLC	12052	112461	10.717	4.134	306	367.520
Hill Thompson & Co.	1480	9263	15.978	2.797	195	47.503
Inver House Distilleries	-2135	17728	-12.043	-24.149	58	305.655
The Invergordon Distilleries	5538	46608	11.882	-22.293	463	100.665
Lang Brothers	53	7630	0.695	-18.847	49	155.714
W. Lawson	3142	11238	27.959	15.915	101	111.267
Long John International	5211	58325	8.934	-21.282	550	106.045
MacAllan-Glenlivet PLC	1558	7583	20.546	19.005	48	157.979
MacDonald Martin Distilleries	2048	19959	10.261	1.858	238	83.861
S.P. Morrison	445	14765	3.014	-3.842	146	101.130
North British Distillery Co.	3884	18495	21.000	8.583	291	63.557
Robertson & Baxter	11516	58446	19.704	15.044	299	195.472
Benmore Distillery	20	693	2.886	-	21	33.000
Glenturret Distillery	-27	569	-4.745	-	13	43.769
Seagram Distilleries PLC	35499	350199	10.137	2.366	3040	115.197
J. & G. Stodart	138	2594	5.320	-10.180	37	70.108
W.M. Teacher & Sons PLC	7464	103827	7.189	-3.525	393	264.191
Hiram Walker & Sons PLC	32591	136380	23.897	1.484	1392	97.974
White Horse Distillers	5722	53681	10.659	26.535	642	83.615
James Burrough Distillers PLC	5894	73469	8.022	5.805	528	139.146
Whyte & MacKay Distillers	1914	107712	1.777	40.232	234	460.308
Bloch Brothers	13	757	1.717	5.285	26	29.115
Industry Totals	527645	3789261	13.925	4.359	30268	125.190

WHISKY DISTILLING (1987)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberlour-Glenlivet Distiller Co.	ABD	-	-	-	-	-	-
Amalgamated Distilleries PLC	LTH	-	-	-	-	-	-
G. Ballantyne & Son	MORAY	-	-	3830	0.109	-	4635
Barton Distilling	GW	182	0.022	4427	0.536	0.558	57
A. Bell & Sons	PTH & KIN	8381	0.023	189422	0.514	0.537	88905
S. Campbell & Sons	AYR	1338	0.086	11428	0.733	0.819	2947
Campbells	GW	-	-	5243	1.104	-	0
Chivas Brothers	GW	13038	0.091	178595	1.240	1.330	68341
J. Dewar & Sons	PTH & KIN	4622	0.055	11742	0.139	0.194	14443
The Distillers Co. PLC	LTH	-	-	-	-	-	-
The Glencadam Distillery Co.	ANGUS	-	-	291	0.144	-	177
Glenlivet Distilleries	ABD	-	-	7315	0.341	-	5877
Matthew Gloag & Sons	PTH & KIN	1475	0.014	1200	0.012	0.026	1572
J. Grant & Co.	HLAND	288	0.136	7336	3.475	3.612	713
J. Haig & Co.	LTH	808	0.018	13274	0.301	0.319	2647
Highland Distilleries Co. PLC	HLAND	3079	0.027	67264	0.598	0.625	16385
Hill Thompson & Co.	LTH	1640	0.177	9720	1.049	1.226	2655
Inver House Distilleries	LNK	734	0.041	1784	0.101	0.142	2253
The Invergordon Distilleries	HLAND	4366	0.094	36819	0.790	0.884	19211
Lang Brothers	GW	767	0.101	1520	0.199	0.300	375
W. Lawson	LNK	989	0.088	17181	1.529	1.617	2893
Long John International	GW	5237	0.090	72569	1.244	1.334	18476
MacAllan-Glenlivet PLC	ABD	662	0.087	14551	1.919	2.006	4705
MacDonald Martin Distilleries	LTH	2107	0.106	22803	1.142	1.248	8868
S.P. Morrison	GW	1188	0.080	8681	0.588	0.668	5889
North British Distillery Co.	LTH	2933	0.159	22358	1.209	1.367	12562
Robertson & Baxter	GW	3087	0.053	76729	1.313	1.366	26223
Benmore Distillery	GW	-	-	153	0.221	-	93
Glenturret Distillery	PTH & KIN	81	0.142	149	0.262	0.404	118
Seagram Distilleries PLC	GW	27001	0.077	343144	0.980	1.057	92758
J. & G. Stodart	GW	-	-	-	-	-	-
W.M. Teacher & Sons PLC	GW	4219	0.041	39305	0.379	0.419	9911
Hiram Walker & Sons PLC	GW	16082	0.118	182320	1.337	1.455	53029
White Horse Distillers	GW	4930	0.092	9831	0.183	0.275	14294
James Burrough Distillers PLC	GW	5491	0.075	72569	0.988	1.062	24191
Whyte & MacKay Distillers	GW	2685	0.025	15674	0.146	0.170	14396
Bloch Brothers	GW	-	-	1720	2.272	-	-
Industry Totals		117410	0.078	1450947	0.821	0.927	519599

WHISKY DISTILLING (1987)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberlour-Glenlivet Distiller Co.	-	-	-	-	-	-	-
Amalgamated Distilleries PLC	-	-	-	-	-	-	-
G. Ballantyne & Son	28.969	11151	11956	0.933	3.1	-	-
Barton Distilling	3.167	7327	2957	2.478	0.6	39.0	16.8
A. Bell & Sons	125.750	205779	105262	1.955	0.2	3.2	15.2
S. Campbell & Sons	19.647	17322	8841	1.959	0.5	23.8	-
Campbells	0.000	27432	22189	1.236	6.0	-	-
Chivas Brothers	57.526	351337	241083	1.457	1.3	20.4	88.9
J. Dewar & Sons	22.497	9041	11742	0.770	0.7	9.2	-
The Distillers Co. PLC	-	-	-	-	-	-	-
The Glencadam Distillery Co.	4.425	-	0	-	-	-	-
Glenlivet Distilleries	167.914	41144	39706	1.036	6.4	-	80.9
Matthew Gloag & Sons	12.476	13330	13702	0.973	2.8	76.9	8.0
J. Grant & Co.	24.586	7232	609	11.875	-	-	-
J. Haig & Co.	21.008	21597	10970	1.969	1.9	28.9	-
Highland Distilleries Co. PLC	53.546	69226	18347	3.773	0.1	0.9	7.4
Hill Thompson & Co.	13.615	9864	2799	3.524	0.7	2.4	73.3
Inver House Distilleries	38.845	5118	5587	0.916	3.2	-	-
The Invergordon Distilleries	41.492	57655	40047	1.440	0.5	15.5	26.1
Lang Brothers	7.653	2982	1837	1.623	0.6	1.7	-
W. Lawson	28.644	20264	5976	3.391	0.3	-	-
Long John International	33.593	62965	8872	7.097	0.2	0.1	-
MacAllan-Glenlivet PLC	98.021	13848	4002	3.460	0.2	23.6	30.2
MacDonald Martin Distilleries	37.261	27257	13322	2.046	0.0	29.7	36.1
S.P. Morrison	40.336	19236	16444	1.170	-	108.4	60.6
North British Distillery Co.	43.168	13704	3908	3.507	0.0	0.6	0.0
Robertson & Baxter	87.702	75894	25388	2.989	0.0	0.2	-
Benmore Distillery	4.429	302	242	1.248	-	-	-
Glenturret Distillery	9.077	661	630	1.049	-	-	-
Seagram Distilleries PLC	30.513	460964	210578	2.189	0.7	36.9	-
J. & G. Stodart	-	-	-	-	-	-	-
W.M. Teacher & Sons PLC	25.219	55749	26355	2.115	0.2	3.9	8.0
Hiram Walker & Sons PLC	38.096	165290	35999	4.592	0.1	9.3	84.8
White Horse Distillers	22.265	13638	18101	0.753	3.6	28.3	-
James Burrough Distillers PLC	45.816	57250	8872	6.453	-	-	-
Whyte & MacKay Distillers	61.521	16945	15667	1.082	4.0	46.2	10.4
Bloch Brothers	-	-	0	-	-	-	-
Industry Totals	39.024	1861504	931990	2.615	1.5	23.1	36.4

WHISKY DISTILLING (1988)

Firms	Profit	Turnover	PSR (%)	Sales (%)	Emp.	ARP
Aberlour-Glenlivet Distiller Co.	358	7116	5.031	70.117	18	395.333
Amalgamated Distilleries PLC	14287	372945	3.831	13.480	2202	169.366
G. Ballantyne & Son	17	24944	0.068	-28.772	148	168.541
Barton Distilling	1658	4036	41.080	-51.162	4	1009.000
A. Bell & Sons	53980	440928	12.242	19.605	741	595.045
S. Campbell & Sons	4341	28726	15.112	84.236	215	133.609
Campbells	1912	7821	24.447	64.687	67	116.731
Chivas Brothers	48516	169684	28.592	17.797	1170	145.029
J. Dewar & Sons	31956	82674	38.653	-2.001	629	131.437
The Distillers Co. PLC	288400	1699300	16.972	20.424	17100	99.374
The Glencadam Distillery Co.	8	446	1.794	-77.975	22	20.273
Glenlivet Distilleries	2323	23600	9.843	10.013	35	674.286
Matthew Gloag & Sons	646	108772	0.594	6.051	129	843.194
J. Grant & Co.	301	1989	15.133	-5.779	30	66.300
J. Haig & Co.	7152	49823	14.355	12.949	122	408.385
Highland Distilleries Co. PLC	14215	121981	11.653	8.465	322	378.823
Hill Thompson & Co.	2091	10795	19.370	16.539	210	51.405
Inver House Distilleries	2213	18383	12.038	3.695	43	427.512
The Invergordon Distilleries	10244	52311	19.583	12.236	469	111.537
Lang Brothers	92	8425	1.092	10.419	51	165.196
W. Lawson	3751	12900	29.078	14.789	98	131.633
Long John International	5992	61900	9.680	6.129	557	111.131
MacAllan-Glenlivet PLC	3167	10249	30.901	35.158	50	204.980
MacDonald Martin Distilleries	3751	26609	14.097	33.318	219	121.502
S.P. Morrison	3043	23496	12.951	59.133	167	140.695
North British Distillery Co.	4648	20181	23.032	9.116	277	72.856
Robertson & Baxter	14492	71180	20.360	21.788	444	160.315
Benmore Distillery	11	501	2.196	-27.706	18	27.833
Glenturret Distillery	116	899	12.903	57.996	23	39.087
Seagram Distilleries PLC	68464	444655	15.397	26.972	3089	143.948
J. & G. Stodart	69	1635	4.220	-36.970	34	48.088
W.M. Teacher & Sons PLC	7366	53633	13.734	-48.344	377	142.263
Hiram Walker & Sons PLC	18305	62262	29.400	-54.347	1299	47.931
White Horse Distillers	6621	59522	11.124	10.881	667	89.238
James Burrough Distillers PLC	5943	75352	7.887	2.563	512	147.172
Whyte & MacKay Distillers	2564	107378	2.388	-0.310	237	453.072
Bloch Brothers	12	531	2.260	-29.855	24	22.125
Industry Totals	633025	4267582	14.833	12.623	31819	134.121

WHISKY DISTILLING (1988)

Firms	Lctn-Code	Wages	IO(Lab)	Cap.(K)	IO(K)	IO(Tot)	Fx. Ass.
Aberlour-Glenlivet Distiller Co.	ABD	-	-	-	-	-	-
Amalgamated Distilleries PLC	LTH	-	-	-	-	-	-
G. Ballantyne & Son	MORAY	-	-	3079	0.123	-	4784
Barton Distilling	GW	63	0.016	5085	1.260	1.276	1829
A. Bell & Sons	PTH & KIN	8584	0.019	182463	0.414	0.433	87101
S. Campbell & Sons	AYR	1001	0.035	12258	0.427	0.462	2919
Campbells	GW	-	-	3397	0.434	-	0
Chivas Brothers	GW	13350	0.079	214301	1.263	1.342	70095
J. Dewar & Sons	PTH & KIN	4369	0.053	26316	0.318	0.371	11186
The Distillers Co. PLC	LTH	-	-	-	-	-	-
The Glencadam Distillery Co.	ANGUS	-	-	1035	2.321	-	220
Glenlivet Distilleries	ABD	-	-	4821	0.204	-	5274
Matthew Gloag & Sons	PTH & KIN	1671	0.015	1200	0.011	0.026	1779
J. Grant & Co.	HLAND	237	0.119	6170	3.102	3.221	636
J. Haig & Co.	LTH	2005	0.040	19623	0.394	0.434	4639
Highland Distilleries Co. PLC	HLAND	2637	0.022	57548	0.472	0.493	14540
Hill Thompson & Co.	LTH	1854	0.172	10601	0.982	1.154	2338
Inver House Distilleries	LNK	1884	0.102	12692	0.690	0.793	5051
The Invergordon Distilleries	HLAND	3178	0.061	33186	0.634	0.695	17177
Lang Brothers	GW	712	0.085	1496	0.178	0.262	358
W. Lawson	LNK	818	0.063	15681	1.216	1.279	2766
Long John International	GW	4543	0.073	75659	1.222	1.296	20543
MacAllan-Glenlivet PLC	ABD	818	0.080	29574	2.886	2.965	5442
MacDonald Martin Distilleries	LTH	1693	0.064	20643	0.776	0.839	9005
S.P. Morrison	GW	1308	0.056	8307	0.354	0.409	5208
North British Distillery Co.	LTH	2592	0.128	19655	0.974	1.102	11964
Robertson & Baxter	GW	2132	0.030	71928	1.011	1.040	19024
Benmore Distillery	GW	-	-	-	-	-	-
Glenturret Distillery	PTH & KIN	123	0.137	564	0.627	0.764	177
Seagram Distilleries PLC	GW	28817	0.065	391881	0.881	0.946	97631
J. & G. Stodart	GW	-	-	-	-	-	-
W.M. Teacher & Sons PLC	GW	3953	0.074	7153	0.133	0.207	7928
Hiram Walker & Sons PLC	GW	17363	0.279	215412	3.460	3.739	65224
White Horse Distillers	GW	-	-	-	-	-	-
James Burrough Distillers PLC	GW	5732	0.076	102115	1.355	1.431	37328
Whyte & MacKay Distillers	GW	2976	0.028	10199	0.095	0.123	14656
Bloch Brothers	GW	-	-	2737	5.154	-	-
Industry Totals		114414	0.076	1566780	1.076	1.042	526823

WHISKY DISTILLING (1988)

Firms	FA/L	Cur. Ass.	Cur. Liab.	CR	Borrow	Inc. Gr.	XR
Aberlour-Glenlivet Distiller Co.	-	-	-	-	-	-	-
Amalgamated Distilleries PLC	-	-	-	-	-	-	-
G. Ballantyne & Son	32.326	10230	11935	0.857	-	-	-
Barton Distilling	457.250	4451	1195	3.725	-	-	-
A. Bell & Sons	117.545	150809	55447	2.720	-	-	-
S. Campbell & Sons	13.579	17635	8297	2.126	-	-	-
Campbells	0.000	21627	18230	1.186	-	-	-
Chivas Brothers	59.910	293198	148992	1.968	-	-	-
J. Dewar & Sons	17.784	72711	35731	2.035	-	-	-
The Distillers Co. PLC	-	-	-	-	-	-	-
The Glencadam Distillery Co.	10.000	-	0	-	-	-	-
Glenlivet Distilleries	150.686	41747	39706	1.051	-	-	-
Matthew Gloag & Sons	13.791	13827	14406	0.960	-	-	-
J. Grant & Co.	21.207	5977	443	13.480	-	-	-
J. Haig & Co.	38.026	60696	45688	1.328	-	-	-
Highland Distilleries Co. PLC	45.155	59226	16218	3.652	-	-	-
Hill Thompson & Co.	11.133	9636	1373	7.018	-	-	-
Inver House Distilleries	117.465	14726	6742	2.184	-	-	-
The Invergordon Distilleries	36.624	44757	28748	1.557	-	-	-
Lang Brothers	7.027	3186	2049	1.555	-	-	-
W. Lawson	28.224	17853	4939	3.615	-	-	-
Long John International	36.882	64289	9173	7.008	-	-	-
MacAllan-Glenlivet PLC	108.840	26639	2507	10.626	-	-	-
MacDonald Martin Distilleries	41.117	23957	12319	1.945	-	-	-
S.P. Morrison	31.183	19267	16270	1.184	-	-	-
North British Distillery Co.	43.193	11139	3449	3.230	-	-	-
Robertson & Baxter	42.847	70918	18200	3.897	-	-	-
Benmore Distillery	-	-	-	-	-	-	-
Glenturret Distillery	7.696	760	373	2.038	-	-	-
Seagram Distilleries PLC	31.606	475729	181479	2.621	-	-	-
J. & G. Stodart	-	-	-	-	-	-	-
W.M. Teacher & Sons PLC	21.029	44567	45342	0.983	-	-	-
Hiram Walker & Sons PLC	50.211	200673	50485	3.975	-	-	-
White Horse Distillers	-	-	-	-	-	-	-
James Burrough Distillers PLC	72.906	89028	24241	3.673	-	-	-
Whyte & MacKay Distillers	61.840	19076	23533	0.811	-	-	-
Bloch Brothers	-	-	0	-	-	-	-
Industry Totals	57.569	1888335	827509	3.207	-	-	-